CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

ORGANIZATIONAL AND FISCAL REVIEW

January 10, 2000



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Table of Contents

I.	BACKGROUND	1
II.	PURPOSE OF THIS REPORT	2
III.	APPROACH	
IV.	METHODOLOGY	3
v.	ENGAGEMENT PRINCIPLES	4
X /T	FINDINGS	
F.	INDING 1 – AUTHORITY VS. ACCOUNTABILITY	6
	Discussion	
171		 11
Г	INDING 2 – CROSS-MEDIA COORDINATION Discussion	
	Alternatives	
F	INDING 3 – ORGANIZATION	18
1	Discussion	
	Alternatives	
F	INDING 4 – RISK ASSESSMENT	26
-	Discussion	
	Alternatives	
F	INDING 5 – RISK MANAGEMENT	30
	Discussion	30
	Alternatives	31
F	INDING 6 – ENFORCEMENT	33
	Discussion	33
	Alternatives	35
F	INDING 7 – STRATEGIC VISION	37
	Discussion	
	Alternatives	37
F	INDING 8 – FISCAL	39
	Discussion	
	Alternatives	
F	INDING 9 – PHYSICAL CO-LOCATION	
	Discussion	
_	Alternatives	
F.	INDING 10 – INFORMATION MANAGEMENT	50
	Discussion	
	Alternatives	
	Appendix A Overview of Cal/EDA Roards Departments and Offices	
	Appendix A Overview of Cal/EPA Boards, Departments and Offices Appendix B Funding Sources and Statutory Limitations	
	Appendix C Organizational Structure of Environmental Regulatory Agencies in Other Management of Control of Con	aior States
	Appendix D List of Interviewees	gor states
	Appendix B Bibliography	
	Appendix F Responses from Legislative Members	
	Appendix F Responses from Legislative Members Appendix G Governor's Reorganization Plan Number One: Creating the California Environment of the California E	onmantal
	Protection Agency	JIIIICIIIAI

I. **BACKGROUND**

The California Environmental Protection Agency (Cal/EPA) was created in 1991 through a Governor's Reorganization Plan. The Boards, Departments and Office were placed within Cal/EPA in order to create a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of State resources against the most serious environmental risks.

The election of a new Governor in 1998 and the appointment of a new Secretary for Environmental Protection brought about the need to reevaluate the goals and objectives established in the original legislative and administrative action that established the Agency. In response, the Governor's budget proposal for the 1999/2000 fiscal year directed the Secretary of the Environmental Protection Agency to undertake a review of the programmatic and fiscal issues facing this Agency. Specifically, the Secretary was directed to report on the following:

- The manner in which environmental programs are delivered, the structure of environmental organizations, and the funding mechanisms that are used to support environmental activities. Following this review, the Secretary will recommend to the Governor appropriate changes to the structure of environmental programs to better meet environmental objectives.
- The funding provided for environmental protection programs to ensure that those activities which pose the greatest environmental and public health risks are given priority for funding.

In addition, Supplemental Language in the Budget further refined this and directed the Secretary to:

- ...report to the chairs of the fiscal and pertinent policy committees of both houses on each of the following:
- (a) The results of the Secretary's review of the Agency's structure undertaken pursuant to the governor's request.
- (b) The progress the Agency has made toward coordinating and consolidating the Agency's strategic plan with the strategic plans of each of the Agency's boards and departments.
- (c) The Agency's efforts to address cross-media regulatory issues including, but not limited to (i) hazardous waste reclassification, (ii) landfill regulatory activities, and (iii) cleanup of MTBE contamination.

Finally, within this decade of the 1990's, information availability and technology have changed in almost revolutionary ways. Information is now readily available that previously took months or years to find or acquire. The technology for managing that information has advanced in ways that overwhelm old technologies and present new challenges for those who want to use it. These changes and challenges alone would require a reassessment of what an agency like Cal/EPA and its constituent Boards, Departments, and Office can and should do to prioritize, initiate, and manage protection of the environment in this large state.

II. PURPOSE OF THIS REPORT

As part of his preparation of the organization and fiscal reviews called for by the Governor and the Legislature, the Secretary of Cal/EPA contracted with R&G Associates for a review of certain specific issues. At the direction of the Secretary, considering time and other constraints, the scope of this effort was limited to the areas that the Secretary felt were most significant. Specifically, the review focused on the following:

- The Secretary's statutory role in managing or being held accountable for environmental protection in the State
- Capacity of Cal/EPA to effectively deal with cross-media issues
- Capacity of Cal/EPA to access, manage, and communicate scientific information and to prioritize scientific and risk issues for its constituent agencies
- Capacity of Cal/EPA to redirect resources to address the most pressing environmental issues
- Implementation of enforcement efforts across Cal/EPA

This report addresses only those issues defined by the Secretary at the initiation of the contract. It is not intended to constitute the Secretary's full report to the Governor or a report responsive to the specific issues raised by the Supplemental Language in the Budget. It is also not intended as a detailed programmatic review of each Board, Department, Office (BDO) or of the Office of the Secretary; nor is it an evaluation of the operational effectiveness of individual BDOs within the Agency.

III. APPROACH

There were four primary components to the approach employed for this project. Each component had a distinct focus, but they are all related.

• Document issues within the Agency

This component focused on internal workings of the Agency as a whole and qualitative definition of issues that most significantly have an impact, positively or negatively, on the capacity of the Agency as a whole and each individual BDO to (a) identify the highest priorities for environmental protection and (b) take appropriate action. This definition of issues also includes evaluating the potential to maximize the use of information technology in establishing and maintaining these priorities. This effort included interviews with members of the Legislature, Legislative staff, Executive and managerial staff of the BDOs, staff within the Office of the Secretary and selected stakeholders. A letter was also sent by the Secretary of Cal/EPA to all legislative members asking for their input. Copies of the members' responses are included in Appendix F.

• Review Agency organizational effectiveness and contributing factors

This component focused on the legislative and regulatory elements that drive the organizational structure of the Agency, at the State and local levels. Organizational effectiveness is affected by three primary factors: (1) BDO incumbents (members and staff), (2) the overall Agency organizational structure itself, and (3) the information made available to the BDO staff. Within the environmental protection arena, roles and responsibilities are widely dispersed, with varying levels of dependence on local efforts such as local enforcement agencies and air quality management districts. As a result, it is most appropriate to assess the overall organizational effectiveness of the Agency through evaluation of the organizational alignment of the constituent parts to one another, including the use of information technology strategies to maximize the capacity of each entity to accomplish environmental protection.

• Review funding structures

This component focused on developing an understanding of each of the special funds that make up the comprehensive funding of the Agency, including defining funding formulae currently in place and any restrictions on the use of the funds. It also considered whether information technology is maximized in the fiscal management and information distribution regarding those funds.

• Review other states' environmental protection structures

This component focused on identifying the environmental protection structures in place in several other states. The research included an investigation and comparison of their environmental regulatory structures. The following states were included in this study: New York, Texas, Florida, Pennsylvania, Illinois, Ohio, Michigan, New Jersey, North Carolina, and Georgia.

IV. METHODOLOGY

A project of this nature requires a methodology that implements the study approach and enforces standards to ensure a high quality product while allowing staff to adjust to the evolving issues. Each element of the methodology contributes to the overall credibility and viability of the final product. Together these elements ensure that each finding and any associated recommendations have been adequately researched and validated. The methodology elements support each work task and prescribe how those tasks are accomplished. The methodology adopted for this project included the following elements:

Project Planning and Management

Project Planning and Management is accomplished to ensure that staff focus efforts on appropriate tasks, that teams are coordinated, that deliverables adhere to established standards, and that project activity adheres to the established timeline. This project included a comprehensive project management team consisting of the Engagement Manager, the Engagement Partner and a Quality Assurance Partner.

• Data Gathering

Data Gathering included identification of stakeholders; development of questionnaires; structured interviews of stakeholders; research into applicable laws, rules, regulations and policies; and compiling statistical data.

• Data Clarification and Analysis

Data Clarification and Analysis involved classifying and synthesizing the information obtained into specific findings. Findings were critically evaluated by team members, the Engagement Manager, the Engagement Partner, and the Quality Assurance Partner, and refined as appropriate. Engagement Principles were documented to help guide the development of alternatives. Alternatives were developed without consideration for political feasibility. No detailed analysis was conducted to evaluate costs, implementation timeframes or other mitigating factors.

• Report Development

Report Development included establishing report standards and guidelines, development of individual sections of the report, review and editing by a single reader to ensure correctness and consistency, and final review by the Engagement Manager, the Engagement Partner and the Quality Assurance Partner, with input from Cal/EPA representatives. Alternatives under a finding are not placed in any specific order.

V. ENGAGEMENT PRINCIPLES

This report was developed under the assumption that the purposes for which Cal/EPA was created are viable, have merit, and are important to the people of the State of California. The fundamental mission of the Agency is not in question: protection of human health and the environment. The initial reorganization effort was an important first step in developing a structure to ensure environmental protection. In this report, we have identified a number of alternatives that the Secretary might consider to enhance the capacity of Cal/EPA to accomplish its mission.

Several fundamental presumptions provided the basis for our analysis of findings and identification of alternatives. These presumptions include:

1. Fundamental environmental protection goals currently in place are a viable and appropriate foundation on which to base analytic decisions. The specific goals stated in the original reorganization plan were:

<u>"First</u>, urgent attention must be turned toward those activities, processes, and substances presenting the greatest risk to public health and the environment.

<u>Second</u>, decisions to set risk-based priorities must be based on rigorous and internally consistent science, recognized to be the best available.

<u>Third</u>, we must act to prevent the creation of pollution in the first instance.

<u>Fourth</u>, environmental protection and economic progress should not be viewed as competing goals, but, to the greatest extent possible, as complementary.

Fifth, vigorous, predictable enforcement must undergird all of our efforts.

<u>Sixth</u>, the regulatory decision-making process must be opened as far as possible to the public as a whole."

- 2. Cal/EPA must be structured to address effectively all facets of cross-media review, such as the review associated with the approval or permitting of a specific substance for sale or use throughout the State, review associated with permitting and maintaining a business site, and response to emergency situations. It is not presumed that all of these activities must take place within the same organization.
- 3. Effective focus of the agency and its BDOs on the most significant risks requires not only cross-media review, but also effective prioritization, coordination, and action. To accomplish these objectives, the latest information must be available throughout the Agency and its BDOs through utilization of the latest information technology.
- 4. Enforcement and compliance actions must be consistent throughout the State, applying consistent factors and achieving consistent results, yet allowing each enforcement agency to take into consideration the unique facts of each case.
- 5. There are several elements that are critical to the fair and appropriate implementation of regulatory activity in the State of California. These elements include: efficiency of operation; effective mechanisms for public input; decision-maker accountability; staff accessibility; and adequate technical evaluation and consideration.
- 6. California is a geographically and economically diverse state. Environmental protection issues that are crucial to each area of the state may vary. Environmental standards, based on sound science, should be written to be statewide in application but flexible enough to allow consideration of local environmental conditions. For example, the emission controls necessary to meet air quality standards in a severe non-attainment area will be different from those required in an attainment area. The risks of a specific level of human exposure to inhalation or ingestion of a carcinogen, on the other hand, will not vary by jurisdiction. Local representation and input, whether through local government, community and public participation, local or regional environmental agencies, or a combination of these mechanisms, allow for consideration of region-specific elements in the planning and delivery of service.

VI. FINDINGS

This report discusses ten findings that have been identified as critical to the ability of Cal/EPA to meet its responsibilities. Each finding involves an issue that is Agency-wide in its impact. The report provides a discussion, conclusion, and a range of alternative actions for each finding. In many instances, the alternatives are not mutually exclusive and provide more than one option that could be implemented at the same time. Each of these findings is discussed in detail in the remainder of this report.

FINDING 1 – AUTHORITY VS. ACCOUNTABILITY

The authority of the Secretary of the California Environmental Protection Agency is identical to the authority of any other agency secretary. Through the appointing power of the Governor, the Secretary has somewhat greater influence over the actions of the directors of the Departments and Office than over the members of the independent Boards. However, there is an expectation, created by the 1991 Reorganization Plan, that the Secretary of Cal/EPA should be held accountable for the programmatic outcomes of all the BDOs. This expectation is inconsistent with the Secretary's authority.

DISCUSSION

The Boards, Departments and Office were brought together as Cal/EPA to create a cabinet-level voice to better coordinate State environmental programs, reduce administrative duplication, and address the greatest environmental and health risks. As described in the 1991 Reorganization Plan, an Agency focused on environmental protection would achieve the following outcomes:

- Establish a primary point of accountability for State environmental programs
- Assure a cabinet-level voice for environmental protection
- Allow for more rapid deployment of coordinated government action to meet environmental needs
- Lead to the reduction of overlapping and redundant bureaucracies

Throughout our interviews, we found that many interviewees did not believe that, when looking at the relationship between the Secretary and the independent Boards, a primary point of accountability had, in fact, been established. Specifically, interviewees expressed the belief that the Secretary did not have adequate control over the operations of the Boards to allow him to be reasonably held accountable for independent Board actions or outcomes.

Based on the reorganization plan, specific functions to be performed within the Office of the Secretary of Cal/EPA include budget review, review of personnel management, enforcement coordination, information management coordination, strategic planning and pollution prevention. In addition, sections 12850 through 12856 of the Government Code define general authorities for each agency secretary over the departments, offices, and other organizational units that comprise each specific agency. These authorities include:

- Providing general supervision over the operations of each organizational unit within the agency
- Advising the Governor on, and assisting him in establishing major policy and program matters affecting each unit
- Serving as the principal communication link for the effective transmission of policy problems and decisions between the Governor and each unit

- Exercising the authority vested in the Governor in respect to the functions of each unit within the agency, including the adjudication of conflicts between or among units
- Representing the Governor in coordinating the activities of each such unit with those of other agencies, federal, state, or local
- Being generally responsible for the sound fiscal management of each unit, including review and approval of the proposed budget of each such unit
- Holding the head of each unit responsible for management control over the administrative, fiscal, and program performance of his or her unit
- Reviewing the operations and evaluating the performance of each unit at appropriate intervals
- Seeking to improve the organization structure, the operating policies, and the management information systems of each such unit
- Developing and reporting to the Governor on legislative, budgetary, and administrative programs to accomplish comprehensive, long-range, coordinated planning and policy formulation in the matters of public interest related to the agency
- Reviewing the organization of the agency and reporting to the Governor on such changes as are deemed necessary to properly segregate and conduct the work of the agency

While the excerpts above clearly describe the Secretary's authority regarding organizational units, we were unable to find any specific definition of the term "unit" as used in these sections. With regard to the boards, the Reorganization Plan stated that the "Management Goal" of the reorganization was to provide the Office of the Secretary with coordination authorities "consistent with the independent status of the boards." At the same time, the Secretary is expected to be the primary point of accountability for environmental issues within the State. Based on our interviews with Agency and BDO staff, it appears that the routine practice of previous Boards has been to not allow the Secretary to be involved in either operational issues or programmatic issues.

The Secretary and the Directors of the Department of Toxic Substances Control (DTSC), Department of Pesticide Regulation (DPR), and Office of Environmental Health Hazard Assessment (OEHHA) are appointed by, and serve at the pleasure of, the Governor. The Governor's ability to remove a director helps ensure that the incumbent director is responsive to the Governor's policies and priorities, including those expressed through the Secretary. Directors may take their disagreements with the Secretary directly to the Governor; but in so doing, they put their relationships with the Secretary and the Governor at risk.

Although the vast majority of the members of the three statutory boards within Cal/EPA are appointed by the Governor, only the members of the Air Resources Board (ARB) serve at the pleasure of the Governor. The members of the State Water Resources Control Board (SWRCB) and the California Integrated Waste Management Board (CIWMB) are appointed for four-year terms, with two members of the CIWMB appointed by the Legislature.

For the ARB, the Governor has the same power of removal of all board members as he does over the Secretary and department directors, that is, each appointee serves at the pleasure of the Governor. The Governor also has the ability to change board chairpersons for the ARB and the SWRCB. The Governor does not have the power to remove any member of the SWRCB or the Regional Water Quality Control Boards (RWQCBs) or the CIWMB, nor does he have the power to designate or remove the chairpersons of the CIWMB or the RWQCBs. These limitations on the authority of the Governor over two of the three boards, and thus the authority of the Secretary, limit the ability to hold the Governor and the Secretary accountable with respect to California environmental protection.

Possible problems of authority

If one assumes that the Secretary should occupy a role that is different from that of other agency secretaries by being held accountable for the programmatic decisions of independent boards, then problems exist with the current division of authority within Cal/EPA that include the following:

- The boards may not be responsive to the Governor's policies and priorities and can act independently of the desires of the Governor and the Secretary
- The boards are reluctant to let the Secretary exercise the same level of management supervision over the operations of their organizations as he does over the two departments and the Office of Environmental Health Hazard Assessment
- The appointment of board members for specific terms limits a new governor's ability to quickly put in place his policies and priorities for environmental protection. It could take up to four years for a new governor to have a majority of his appointees on these boards, with the prior governor's policies and priorities tending to continue during the transition period

CONCLUSION

The Secretary of Cal/EPA has authority and power commensurate with that of other agency secretaries in the State. However, when the Agency was established, the Reorganization Plan expressed that the Secretary of Cal/EPA would serve as the "primary point of accountability" for the management of the State's environmental protection programs. This created an expectation that the Secretary should be held accountable for programmatic outcomes. However, based on the statement in the Reorganization Plan that the Secretary's coordination authorities are to be "consistent with the independent status of the boards," and the absence of statutory authority different from that of other agency secretaries, it appears that the Secretary was not intended to have any more authority than other secretaries. The Secretary has no authority over the BDOs' in their adoption of standards, rules, and regulations, nor their prioritization, monitoring, review of issues, or enforcement of their decisions. The Secretary's current authority is essentially limited to his ability to influence the BDOs' actions through persuasion. Because the Secretary has limited authority over BDO activities, and less practical power with respect to the independently-appointed boards, the Secretary cannot legitimately be held accountable for board actions or inactions with respect to their adoption of standards, rules, and regulations, nor their program prioritization, monitoring, review, and enforcement.

ALTERNATIVES

1. Seek legislation to clearly define the authority, and thus the accountability, of the Secretary with respect to the boards.

The legislation should specify that the Secretary has the same authority over all boards as he does over the departments and office. This legislation alone would not change the appointment, confirmation, removal, or terms of board members, but it would strengthen the Secretary's ability to supervise the activities of the boards and their programs. Although such legislation would give statutory strength to the Secretary's authority, its ultimate effect is unknown, as it would still leave the possibility that board members, immune from the Governor's removal, would continue to act independently of the direction of the Secretary.

2. Seek legislation to realign the composition and terms of the Boards. Designate three members of each board to serve at the pleasure of the Governor and four members who represent appropriate technical disciplines to serve defined terms. For each board, the Governor would designate one appointee to be chairperson.

This alternative ensures that (1) a Governor's perspective will be represented as soon as the Governor sets appointments and (2) technical and scientific considerations are given appropriate weight. Terms for technical members should be defined so they are staggered and the terms of no more than two members expire in a given 24 month period. Terms for these individuals should be fairly short in duration, preferably two to three years. This alternative requires that all of the existing Boards be reconstituted and their memberships changed.

3. Seek legislation to make members of all Cal/EPA boards appointed by and serving at the pleasure of the Governor; provide that the chairperson of each board be appointed by the Governor.

Making all board members appointed by, and subject to removal by, the Governor enhances the probability that board actions will be consistent with the environmental protection policies and priorities of the Governor and thus, the Secretary. This alternative could result in significant operational confusion due to loss of consistency in Board philosophy if a Governor chose to replace an entire Board at one time, rather than staggering replacements. Also, an entire Board of new members potentially places too much power in the hands of board staff while new members establish themselves and "learn the ropes."

4. Reconfigure the role and function of the Boards to focus them on advisory roles and approval of regulations. Establish Departments to replace each of the current Boards.

This alternative clearly establishes accountability to the Secretary. The Boards, in this construct, would necessarily be focused on promulgation of regulations. They would not be involved in any aspects of daily management or operation of the staff. This alternative is similar to structures currently in place in the Resources Agency.

5. Reestablish the intent of the Secretary function and remove the expectation of a "primary point of accountability" as a management goal.

This change makes the management goal consistent with the established authority of the Secretary and retains the independent status of the Boards. However, this alternative does not alter in anyway the conflict of the Secretary not having any control over the Boards, or the Secretary's relationship to the Boards. With the removal of the expectation of accountability, the pressure brought to bear on the Secretary as a result of Board actions may be reduced. As a concomitant result, the Secretary should be able to focus more clearly on providing leadership in cross-media information management, regulatory initiatives, and enforcement.

FINDING 2 – CROSS-MEDIA COORDINATION

Cal/EPA has not effectively implemented mechanisms for preventing, identifying, and responding to environmental problems involving multiple media. The Agency can and should lead its Boards, Departments, and Office toward greater cross-media consideration and coordinated action.

DISCUSSION

Historical basis for current alignments

California's current approach to environmental protection has evolved over the past half century. Programs and organizations were created at different times and for different reasons — generally to address a specific environmental pollution issue or because of federal government mandates. Often California law developed first, and federal law used California law as a model. For example, the Porter-Cologne Water Quality Act of 1965 predated federal efforts on surface water by five years and on groundwater by eleven. The Hazardous Waste Control Act of 1974 predated and provided the model for the federal Resource Conservation and Recovery Act. Originally, the federal and state statutes were specific to a single medium (water, air, solid waste) or pollution category (toxic substances, pesticides).

Federal environmental statutes such as the Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act and the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund) establish baseline goals, standards and procedures that all states must meet. States are free to set goals and standards greater, or more strict, than the federal goals and standards; but states must demonstrate that state-developed goals and standards are, at a minimum, equivalent to federal law. The organization and administration of federal environmental programs are important considerations because compliance with these programs has a significant funding impact.

Because federal environmental laws are media-, pollutant-, and activity-specific, it is logical that states organize environmental activity likewise. However, to do so may limit a state's ability to organize its programs to achieve cross-media results. If a state organizes around functional or other organizational models designed to meet the challenges of cross-media issues and problems, accountability for federal standards may become more difficult to demonstrate. Failure to demonstrate compliance could result in possible sanctions and jeopardize federal funding.

The Legislature has acted to ameliorate some of these cross-media issues by giving the SWRCB primacy over water-related issues at solid waste sites (AB 1220) and by requiring DTSC to incorporate Water Board requirements in hazardous waste permits (Health and Safety Code Section 25204.5). However, these discrete requirements do not alter the basic structure of BDOs acting alone, often without consideration of cross-media issues.

Impact of information flow and changing problems

Traditional regulatory approaches to air and water pollution were built around the expectation that relatively few pollutants affected both ambient air and water quality. Problems were seen as relatively

constant; the solutions focused on stopping or reducing what comes out of a smokestack or out of a pipe leading to a river or ocean. Today's view of environmental problems has changed dramatically.

First, we now know that problems are cross-media and multi-media in nature. Information about the water impacts of particulate deposition or the air impacts of stripping contaminants out of groundwater are widely recognized. Important new information is becoming increasingly available regarding the impact of small levels of pollutants on the environment or on toxicological receptors. Such information has inherent cross-media implications, but there is no institutional structure to encourage or require cross-media action. OEHHA could be, but currently is not, the primary source of basic toxicological and epidemiological assessment of chemical risk to human health for all boards and departments. The Secretary's office could, but currently has no mandate to, provide across-agency leadership to focus budgetary and regulatory attention on those multi-media problems which appear to need attention on a worst-first basis.

Second, although end-of-pipe problems persist and require vigilant enforcement, emerging problems of non-point sources, such as stormwater runoff and air emissions from consumer products both indoors and in ambient air, are more difficult to approach within traditional regulatory frameworks. These dispersed sources require both multi-media and increased pollution prevention orientations.

Third, science and engineering have become so specialized that it is virtually impossible for one person, regardless of training, to know it all. These complexities require teamwork. The concept of "one-stop" permitting or "unified" enforcement can no longer mean that one person or group is responsible for isolating all cross-media implications of a project; just as importantly, no project should be evaluated on the basis of its effect on one medium alone, unless it is obvious that there will be no cross-media impacts. However, these reviews must be undertaken by a team of highly qualified individuals, each expert in appropriate fields, working together. Our interviews yielded mixed reactions to the Certified Unified Program Agencies (CUPAs) and Permit Assistance Centers (PACs), both of which lack such sophisticated teams of experts and appear to embrace more of a one-stop approach to permits and enforcement with no substantial support for either of these models.

MTBE, cross-media impacts, and the role of the Secretary

Existing statutes give the Agency responsibility for the overall performance of these organizations and hold the Secretary "the primary point of accountability for state environmental programs". However, the lines of accountability are blurred due to the medium-specific laws and the organizational structure under which the Agency works. This is especially true for cross-media regulatory issues and emergency response activities.

The adoption of MTBE regulations by the ARB provides a good example of the difficulty in assessing responsibility. The Federal Environmental Protection Agency has authorized the use of MTBE for over ten years to reduce air emissions from gasoline. As the ARB began developing regulations for a fuel additive that would reduce emissions in California, it gave the gasoline refining industry latitude in selecting from four or five different substances that would achieve the desired result. The industry chose MTBE, a substance it had already proved feasible to manufacture at the least cost in other parts of the country. As a consequence, the ARB focused on MTBE as the probable additive for its regulations. With no formal process in place to isolate cross-media impacts, the ARB made inquiry of the SWRCB regarding the possible negative impacts the substance would have in water, while assuming the risk to

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water supplies would be minimal due to the SWRCB's Underground Storage Tank Program, which was expected to provide adequate protection from leakage into groundwater. The ARB also submitted MTBE to the OEHHA for scientific review. However, there was no formal cross-media review undertaken, and the Agency as a whole relied on these generally ad hoc inquiries. Although using MTBE had a positive impact on air emissions, it proved to be a serious pollution source in groundwater. Many underground gasoline storage tanks leak in spite of the tank replacement program. The issue eventually was elevated to the Governor to determine what actions should be taken, and by whom, to address the cross-media result.

In this case, the Governor asked the Secretary of Cal/EPA to take charge of recommending a course of action, after first receiving input from the University of California, constituent agencies, and the public. The Governor's action on MTBE is indicative of the leadership role that Cal/EPA can and must play in resolving and coordinating cross-media responses to environmental problems and the initiatives to control them

Problems of inter-agency conflicts

The problems of cross-media review (which necessitates cross-organizational review) and accountability are exacerbated by the attitudes some of the interviewees exhibited toward other BDOs. While generally expressed within the context of "best science," many interviewed staff expressed the belief that their own department or board was better suited to a job that another organization was performing and that, if done by their own department, better remediation or regulation would occur. This attitude does not come from the executive level, but from further down in the organization--at a level, importantly, that new appointments of this Administration will not reach. The implementation of AB2061 (Health and Safety Code Section 25260 et seq., creating a process by which the Water Board, DTSC, or local government may be designated the lead agency on a site cleanup) was included among the issues cited as causal in the dissatisfaction that exists among BDOs, some of whose managers felt that the regulated community was "shopping around for the best deal", even if the best deal was not the best environmental solution. Some interviewees felt that the prior administration had encouraged economic competition between the BDOs in the pursuit of this clean-up activity and that the environment was suffering as a result. These interorganizational conflicts affect the willingness of the BDOs to cooperate and work together to resolve cross-media issues. They also may reflect differences in opinion between a single-medium agency such as SWRCB and a multi-pathway risk regulator such as DTSC.

Lack of compliance with the California Environmental Quality Act

The California Environmental Quality Act (CEQA) applies to any governmental discretionary decision, subject to certain statutory and regulatory exemptions. CEQA requires that *all* environmental impacts of a project be evaluated, not just those under the purview of the agency making the decision. As a result, this existing law requires cross-media consideration of actions ranging from requiring MTBE to permitting a compost facility to approving a hazardous waste cleanup. Many environmental regulations are beneficial to and have no obvious adverse impact on the medium they address. Consideration of cross-media impacts requires an exercise in thought and consultation with sister entities that may expose an unforeseen impact on another medium, introducing complexity and potentially delaying the process.

CEQA cannot substitute for cross-media information exchange and agency coordination, but it serves as a ready-made mechanism for achieving cross-media considerations on a day-to-day basis. Unfortunately, CEQA is not fully implemented by all of Cal/EPA's BDOs when they are the lead entity; and resources

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are generally unavailable within Cal/EPA entities to comment seriously on the CEQA document of another BDO.

DTSC currently uses CEQA processes for approval of site permits. This process can act as a mechanism for enhancing cross-media review for site-specific projects. DTSC also routinely applies CEQA to state level regulation changes, but it has never conducted an Environmental Impact Report for one. The CEQA process is not used by all BDOs in their evaluation process, although they have "functionally equivalent" processes. Our interviews did not yield consistently positive information about the implementation of any of these processes, although many interviewees expressed the belief that the CEQA process was a good starting point. However, the efficacy of these processes seems to depend entirely on the dedication of the staff implementing them.

Environmental Management System Innovation Initiative

Cross-media issues are prevalent at many individual facilities and Cal/EPA has recently launched an initiative to evaluate a supplement to the current media-specific approach to regulating businesses. The purpose of this initiative, the Cal/EPA Environmental Management System Innovation Initiative, is to determine whether and in what manner the use of an Environmental Management System (EMS), in addition to existing regulatory requirements, increases public health and environmental protection, and provides better information to regulators and the public than existing regulatory requirements. This initiative is based on current efforts to revise the ISO 14000.

An EMS is a way to manage an organization's comprehensive environmental responsibilities. It focuses on incorporating pollution prevention and resource conservation into an organization's routine activities. Using the continuous improvement cycle approach of "plan-do-check-adjust," an EMS typically involves:

- developing an environmental policy
- identifying environmental impacts such as waste, pollution, and the use of resources
- determining all environmental legal requirements
- integrating multi-media issues
- establishing performance goals for environmental improvement
- directing resources and assigning responsibility necessary to meet performance goals and all legal requirements
- developing training and communication procedures
- conducting a management review process to assess performance
- taking corrective action to improve performance

Cal/EPA will select up to eight organizations to participate as pilot facilities. Six organizations have already volunteered to work with Cal/EPA as pilot projects. California also is participating in a national study through involvement in the Multi-State Working Group which involves other projects of this same nature.

CONCLUSION

The apparent dichotomy of accountability for cross-media issues between the Secretary's Office and the BDOs limits the Secretary's ability to:

- Identify current and potential cross-media issues
- Develop plans and strategies for achieving the desired result from the independent decisions and actions of the respective boards, departments and office

A significant need exists to improve cross-media coordination and review. Although only two of the BDOs are fully single-medium in focus, none of the BDOs truly consult on a collegial and constructive basis to achieve cross-media results. In addition, serious inter-BDO problems must be addressed for effective cross-media work to be accomplished. The nature of cross-media activity makes it extremely difficult to determine which entity is responsible for taking the first step to ensure that appropriate review occurs. Nonetheless, to optimize environmental protection in the State, cross-media impacts and analyses must be accomplished.

ALTERNATIVES

Because structural realignment (which would have an impact on many of the fundamental causes of the current cross-media problem) is discussed elsewhere, these alternatives focus on changes that could be implemented in the current organizational structure. Cross-media orientation at both the executive level and the program working level are equally important if cross-media objectives are to be effectively achieved.

1. Organize the budget process around Agency-wide environmental protection strategies and priorities.

The Secretary's authority within Cal/EPA is most clearly defined with respect to the budget process. The Office of the Secretary can extend its influence within the Agency to promote more effective approaches to cross-media issues by (1) establishing an Agency-wide program structure that, among other strategies and priorities, reflects the importance of intra-Agency cooperation and coordination in identifying and addressing cross-media issues; and (2) requiring that Budget Change Proposals (BCPs) submitted by the BDOs reflect this program structure. To the extent that the cross-media issues are identified, joint BCPs can be prepared that clearly define intra-Agency linkages, consistent with federal authorization.

2. Ensure that liaisons to the BDOs focus on cross-media issues.

The Agency Secretary has expressed his intent to assign members of his staff to serve as liaisons between the Office of the Secretary and the BDOs. With regard to cross-media management within Cal/EPA, the role of each liaison should require they become fully knowledgeable about the programs, processes, and management of their assigned BDOs and include an expectation that they will:

- Monitor the formulation of policy, strategic plans, and BCPs
- Meet and confer with liaison counterparts assigned to other BDOs to identify cross-media issues, priorities, and problems

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• Advise the Secretary during the Agency's strategic planning and budget review processes

3. Establish a Cal/EPA Executive Management Team (EMT) as a tool for intra-Agency coordination and cooperation.

An advisory Executive Management Team could be established as a tool for intra-Agency collaboration and accountability for the budget related objectives outlined above as well as other administrative policy matters. The Secretary could use the previously described budget approach and liaison personnel as a tool to identify, evaluate, and recommend funding for cross-media programs and objectives.

In addition to the Secretary, membership on the EMT could include the chair of each board, director of each department or office, and the executive officer of each board. The Office of the Secretary would provide primary staff support to the EMT, with assistance from BDO staff as needed. Unlike the Environmental Policy Council (EPC), described in the Executive Order as a tool for bringing the "active participation of the public and other interested parties" to environmental program deliberations, the EMT would assist the Secretary in addressing internal issues of an administrative and operational nature.

4. Develop an intra-Agency Emergency Response Plan for responding to significant environmental release events.

Two or more significant "environmental release" events have occurred in each of the past several years – tire fires, hazardous waste spills, and the like. The intra-Agency response to these events has been largely ad hoc, with leadership for the response primarily determined by the nature of the pollution, the principle media into which pollution is being discharged, or the relative availability of Agency resources.

The Secretary could initiate the development and maintenance of an intra-Agency Emergency Response Plan similar to those formulated at the State and local government level for highway spills and other accidental releases. State level precedent for such a plan exists: DTSC administered the Railroad Accident Prevention and Immediate Deployment (RAPID) plan which was mandated by statute after the railroad spill of pesticides into a river near Dunsmuir. However, RAPID was subject to sunset provisions and funding was discontinued. The concept, however, deserves additional consideration. A continuing statewide plan would clearly detail the specific roles and responsibilities of the various Agency organizational units and identify linkages with other federal, state and local agencies.

5. Integrate all Legislative Affairs and Public Information functions within a single unit in the Office of the Secretary.

The Legislative Affairs and Public Information functions now located within each of the BDOs, as well as in the Office of Secretary, focus on the media-specific perspective of their respective organizations. The move to the new Cal/EPA building next year (discussed in a separate finding) presents an opportunity to integrate these functions within the Office of the Secretary which would enhance opportunities to address the broader concerns of the Agency. This is particularly true if the Secretary establishes the previously described Executive Management Team.

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Staff of these integrated units would create and respond to legislative proposals and publications from across BDO and media lines, and they would work with the management of the respective organizations and the Office of the Secretary liaison staff to address the specific needs of the BDOs. This approach would further enhance cross-media orientation in the Agency. The EMT's consideration of positions on legislation and the issuance of major press releases and publications could have a significant positive effect on the orientation of BDO management and staff towards the mission of the Agency rather than the narrower mission of a respective board, department or office.

6. Evaluate the feasibility of intensifying compliance with the CEQA process.

Compliance with the CEQA process should be considered for use by all BDOs within Cal/EPA as a way to help accomplish cross-media review. However, in order to ensure that it meets the need, a comprehensive assessment of the outcomes from prior use of this process should be conducted. This assessment should include an evaluation of the accomplishment of cross-media review and input, determination of whether a formal peer review of CEQA implementation should be instituted to ensure that the process is used consistently statewide, and determination of whether the program could be strengthened.

7. Evaluate the feasibility of expanding the Permit Consolidation Zone program.

This program is underway on a pilot basis in four jurisdictions. The concept of this program is to consolidate much of the permit information required by the regulating agencies, both state and local, into a single application. Duplication of effort is intended to be minimized. While it may be too early to evaluate the effectiveness of this approach to environmental management, this is an ongoing program for which cross-media implications must be considered.

8. Evaluate the feasibility of enhancing Permit Assistance Centers.

The 13 PACs primarily guide applicants seeking to understand State and local permit requirements and processes. Currently, the Centers direct the applicant to the appropriate local or State entity, but they make no evaluation and do not get involved directly in the permitting process. The role of the Permit Assistance Centers could be enhanced by staffing them with program personnel who have sufficient program expertise and are authorized to provide substantive information to applicants about the permits required as well as the application process. Alternatively, even if staff direct the applicant to the appropriate entity, they may be prime candidates for cross-media training, so as to provide early recognition of cross-media issues.

9. Develop and implement a comprehensive cross-media training program.

The ARB has developed a comprehensive cross-media training program that it conducts annually as a one-week symposium. The symposium focuses on enforcement activities such as cross-media inspections, applicability of media-specific laws and regulations, jurisdictions, compliance and enforcement strategies. This training program could be expanded to include all aspects of the environmental programs of the BDOs and conducted on a continuing basis as an "environmental school" for Cal/EPA employees and local implementing entities. This training could have a significant impact in changing the Agency's culture from a media-specific orientation to one with a broader environmental perspective.

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FINDING 3 – ORGANIZATION

The current organization of Cal/EPA involves overlapping media and program responsibilities. Efforts have been made to coordinate and allocate these responsibilities, but more efforts are needed.

DISCUSSION

In addition to the Office of the Secretary, Cal/EPA includes, three boards, two departments, and one office. Two boards are devoted to a single medium: air or water. The third board, CIWMB, regulates an activity, the management of solid waste, which includes impacts on air (incineration or "transformation"), land, and water (landfills, composting, etc.). Each department deals with the environmental impact of specific substances (hazardous substances and wastes or pesticides) on all three media. All five organizations are engaged in registration, regulation, and/or monitoring of businesses or business products. (The sixth organization, the Office of Environmental Health Hazard Assessment, is primarily involved in performing scientific assessments and is not part of this specific issue.) Statutes and regulations give the Water Board primacy over water-related impacts with respect to some functions that would seem to be under the purview of CIWMB or DTSC.

Organization	Structure	Regulatory	Media
ARB	Board	Yes	Air
ОЕННА	Small	No	Cross-media
	Department		
CIWMB	Board	Yes	Cross-media
DPR	Department	Yes	Cross-media
DTSC	Department	Yes	Cross-media
SWRCB	Board	Yes	Water

Program Overlap

When Cal/EPA was established, the boards were transferred intact to Cal/EPA. Their roles and functions already were well defined. The departments were created by transferring functions from existing departments (Health Services and Food and Agriculture) into the newly created departments. The establishing legislation did not realign overlapping responsibilities. Since that time, numerous evaluations have been conducted and several legislative proposals have been offered to realign the overlapping functions within Cal/EPA. To date, no comprehensive initiative has been successful, and the BDOs continue to grapple with this issue.

The organization of service must also be responsive, as discussed under Finding 2, to federal mandates. The SWRCB has Clean Water Act authorization from the federal EPA, the ARB has Clean Air Act authorization, and DTSC has RCRA authorization. Alternative alignment would require consultation with federal EPA to ensure that the EPA finds any alternative structure acceptable and would allow continued funding and program authorization.

The BDOs recognize, and have attempted to deal with, the conflicts that result from the overlap of responsibility and function. Numerous Memoranda of Understanding delineate how these organizations

will deal with one another in addressing specific problems. Our discussions with BDO executives revealed a willingness to participate in multi-agency activities for the overall enhancement of environmental protection. At the same time, however, we found that BDO middle management often expressed dissatisfaction with other BDOs. Objections generally centered on disputes over best practices. For example, one BDO may perceive another's approach to site clean-up to be less environmentally appropriate from a holistic perspective; that is, their approach is inappropriately media-centric, resulting in less thorough overall environmental protection. This issue is especially true in site cleanup situations where the SWRCB's statutory jurisdiction focuses on protecting the beneficial uses of the waters of the State; whereas DTSC uses a multi-pathway analysis to address risks to human health and the environment, including risks of airborne particulates or gases from the site, ingestion of contaminated materials by children, and dermal absorption.

In other instances, a BDO may feel that its own evaluation of the impact of a substance on a specific medium is more credible than that of a sister organization. The degree of enmity between BDOs varies, and it is more severe between some BDOs, generally those most directly involved with site licensing and clean-up activities. This friction stems, in part, from a feeling by each organization that it is responsible for environmental protection issues associated with the site or substance in question, and each believes its own processes and standards are superior.

Media Overlap

The two departments within Cal/EPA are cross-media in their focus. They are concerned with the impact a hazardous substance or a pesticide has on the environment as a whole, without limitation in terms of the media in which the substance is present. Both organizations are very diligent in their evaluation of the potential impact a substance might have on the environment. At the same time, these organizations do not bear responsibility for monitoring the aggregate contaminant level of a specific medium, be it air, land, or water. Their mission statements focus on substances, site permitting, and evaluation, not media. For example, DTSC may evaluate cross-media risks from a contaminated site, including risks to water, but only the Water Boards establish basin plans and, in the future, Total Maximum Daily Loads (TMDLs). DPR may establish pesticide application requirements based on worker safety, air quality problems caused by drift, or water quality problems caused by runoff, but DPR does not set or monitor air quality standards.

The ARB and SWRCB focus on specific media. Each board is charged with the protection of the overall quality of a specific medium, and each is responsible for the permitting/licensing of facilities that have a direct impact on their medium. However, any specific facility licensed or permitted by one of these boards or its designated local entity also may be licensed or permitted by one or more of the other boards and departments. Depending on the type of landfill, an air permit for methane recovery at an existing or closed landfill does not address risk issues within the purview of the SWRCB, DTSC, or the CIWMB.

Overlap and Delegation of Permitting and Enforcement Programs

The implementation of State environmental laws also varies considerably in the extent to which permitting and enforcement takes place at the State, regional, and local level. The ARB regulates mobile emissions and some consumer product emissions on a statewide basis, including standard-setting and enforcement. Stationary sources are regulated directly by county Air Pollution Control Districts and regional Air Quality Management Districts (both referred to hereafter as AQMDs). The AQMDs are regional

governmental entities, although The South Coast AQMD has State-level appointees from the Governor and Legislature. The ARB has some authority over the districts because it must approve AQMD contributions to the State Implementation Plan under the Federal Clean Air Act, but the ARB no direct involvement in permitting or enforcement at the AQMD level.

The SWRCB sets standards and adopts formal Policies that govern the operations of the RWQCBs. The RWQCBs, unlike the AQMDs, are State agencies even though they operate through Boards comprised of local residents. Permitting and enforcement activities are initiated at the RWQCB level, as are the adoption of regional Basin Plans; but all are appealable to the SWRCB.

DTSC sets standards, issues permits, and enforces the law on a statewide basis, with local offices in different regions of the State. For selected classes of businesses, e.g. generators and persons in the "tiered permitting" category, primary enforcement activity has been delegated to local Certified Uniform Program Agencies (CUPAs) created by statute, but those agencies must be certified by Cal/EPA as capable of performing those responsibilities. There is, however, no right to appeal CUPA action or inaction to Cal/EPA. Because CUPA enforcement recently has been a subject of criticism by members of the Legislature, the consistency and level of enforcement by these truly local agencies, as compared to the AQMDs and RWQCBs, should be evaluated to determine if the problems are programmatic or structural (i.e., inherent in the total delegation to local bodies).

The CIWMB sets State standards. Permitting and enforcement are generally initiated by Local Enforcement Agencies (LEAs) which are parts of cities or counties; but permits must be issued by the Board. Enforcement actions are appealable to the Board.

DPR approves pesticides for use in the state and sets standards for application and usage. Standards are set at the State level and do not vary regionally. County Agricultural Commissioners are responsible for ensuring that established standards are followed.

Environmental Policy Council

The Environmental Policy Council (EPC) is comprised of:

- Secretary, Environmental Protection
- Chairperson, Air Resources Board
- Chairperson, Integrated Waste Management Board
- Chairperson, Water Resources Control Board
- Director, Department of Pesticide Regulation
- Director, Department of Toxic Substances Control
- Director, Office of Environmental Health Hazard Assessment

Statutes vest the EPC with assisting the Secretary in coordinating the implementation of cross-cutting environmental programs, development of recommendations for the Governor as to actions necessary to effectively protect and enhance the environment of the State, facilitating the active participation of the public and other interested parties, and the development of an environmental strategic planning process. While there is great merit in the implementation of a formal mechanism that ensures public input, the current extremely broad purview of the EPC, in combination with its composition, could hinder the

Secretary's ability to effectively review cross-media issues. The enabling statutes for this Council are extremely broad, and they could be interpreted to mean that almost all aspects of inter-BDO activity are part of the EPC's responsibility. Given the composition of the EPC, there is the potential that the Secretary could be in violation of the Bagley-Keene Act if he conducts even a routine meeting of the executives of his own BDOs without public notice. There are a number of confidential issues that the Secretary could legitimately wish to discuss with this group outside a public setting. A critical one is the budget development process which is clearly under the authority of the Secretary and is a confidential matter.

Board Composition

The three Boards that are part of Cal/EPA vary significantly in their composition, as shown in the chart below.

	ARB	CIWMB	SWRCB
No. of members	Eleven	Six	Five
Chair selection	Governor appoints	Board elects	Governor appoints
Member appointment	Governor appoints*	Governor appoints four; Senate Rules appoints one; Speaker appoints one	Governor appoints*
Length of member terms	No specific length; serve at Governor's pleasure	Four years	Four years
Chairperson status	Full time	Full time	Full time
Member status	Part time	Full time	Full time

^{*} Subject to Senate confirmation

We could not find any significant advantage, from an outcome perspective, to either full-time or part-time Boards. However, the depth of the Boards' involvement in routine regulatory activity varies greatly and should be considered in a more detailed evaluation of the reasonableness of the Board membership compositions. For example, permitting decisions under the jurisdiction of SWRCB and stationary source permits under the ARB are made through the RWQCBs and AQMDs, respectively, and do not routinely come before the State Boards for final disposition. CIWMB local agencies determine if a permit is complete and ready to be presented to the Board, but all permits come before the Board for action. Although the SWRCB is considered a single board, it has two distinct functions: water resources control and water quality control. If a determination is made that, for the sake of governmental efficiency, an alternative composition of the Boards should be instituted, some changes in the types of activity brought before each Board may be appropriate.

Board Support Staff

The level and type of support each Board member receives varies significantly:

- The Chair of the ARB has one policy advisor. The other members of the ARB do not have advisors
- Each member of the CIWMB has two advisors
- None of the members of the SWRCB have advisors

Based on the information available, there does not appear to be a significant qualitative advantage, demonstrable through Board outcomes, to any one of these staffing patterns. There are, however, significant differences in the types of activity in which each Board becomes involved on a regular basis. Statutory differences, the type of activity delegated to local agencies, and personality differences among the various Chairpersons are among some of the factors that influence what is brought to a Board (and, hence, the type and depth of knowledge that a single Board member must have). Changes in the support structure for any Board should include an assessment of the type of work the support staff perform and a plan for ensuring that the overall quality of decision-making at the Board level does not suffer as a result of proposed changes.

Comparison with Other States

Appendix C contains a brief analysis of organizational structures of environmental programs in other States. Like California, these other States have widely diverse organizations, in part based on history and the need to comply with federal authorization requirements. Based on our limited review of those States, we cannot conclude that any particular structure, or a uniformity of structure, is clearly better for protecting human health and the environment or in providing efficiencies of service or implementation. Instead, we find that statewide board and department structures have their perceived advantages and disadvantages, as do varying degrees of local control.

CONCLUSION

The Cal/EPA organizational structure has evolved over time and is both medium-specific and substance-specific. This results in conflict between and among the BDOs as to which has preeminent authority. There is no consistent application in the use of Boards or Departments to accomplish regulatory activity. Levels of authority vary between State and local entities. Permitting, enforcement and appeals functions are placed at various levels of State and local control. There is no consistent process for public involvement in BDO decision-making.

The EPC could serve a useful role in ensuring that public comment is obtained by the Agency. Senator Bowen recognized this potential and her bill on the Phase 3 gasoline regulations requires that the EPC be convened to hear public comment on the proposed regulations. That meeting is scheduled to occur in January 2000. However, given the potential for violation of Bagley-Keene, R&G Associates recommends that the Secretary immediately seek clarification on the potential conflict and, if necessary, take action to: (1) revise the purview of the EPC, (2) eliminate the EPC, or (3) obtain legislative exemption from Bagley-Keene for specific activities that are conducted in the routine management of the Agency.

ALTERNATIVES

The implications of reorganizing the existing Cal/EPA structure are significant in terms of cost, time, and potential disruption of service. There are numerous alternative structures that could be put in place in Cal/EPA. Each has its strengths and weaknesses. No analysis was done to try to evaluate the cost or advisability of implementing any of the alternatives provided below, because the available timeframe would make such an assessment purely superficial. The alternative to structural reorganization would be to focus on functional improvements using the existing BDO and Agency structure.

1. Establish boards for all regulatory activity within Cal/EPA and delegate permitting and enforcement to regional implementation zones that are board specific.

This alternative standardizes the approach to regulatory activity by placing all activity under the control of boards. Regional control and input is enhanced by the establishment of regional boards with elected or appointed representatives. This alternative leaves intact the current ARB and SWRCB structures.

State Level

At the state level, all regulatory activity within Cal/EPA would be accomplished under Boards. This alternative envisions five (5) state boards that are medium- or substance-specific. State boards would hear appeals; develop standards, guidelines and model ordinances; approve statewide regulations; approve individual regional zone plans; review regional implementation zone enforcement activity and take appropriate action as needed; serve as appeals bodies, if appropriate; and regulate substances or items for sale or use within the State.

Regional Level

At the regional level, this alternative creates five regional entities per implementation zone with boards comprised of regionally elected or appointed representatives. These regional boards would parallel the Boards at the state level in terms of medium or substance specificity and handle all permitting and enforcement functions. The current geographic boundaries used by SWRCB are a reasonable level of distinction and would facilitate watershed management by aligning geographic boundaries of the various agencies for all but the AQMDs. The new regional boards would replace activity currently conducted by Local Enforcement Agencies, County Agriculture Commissioners, and CUPAs. Appeals of the local board decisions would, if statutorily allowed, be made to the appropriate state-level board.

2. Establish boards for all regulatory activity within Cal/EPA and delegate permitting and enforcement to a single multi-media regional board.

This alternative standardizes the approach to regulatory activity by placing all activity under the control of boards. It creates a single regional board for each watershed region in the State responsible for implementing the regulations, policies, etc., developed by five state-level boards. This structure provides the potential for cross-media organizational alignment at the regional level. However, because the state-level boards remain medium- or substance-focused, it is likely that the regional

boards would need assistance in interpreting and applying the various state regulations and policies. This need might result in increased inter-Board communication at the State level or result in conflicts or inconsistencies at the regional level.

State Level

At the state level, all regulatory activity within Cal/EPA would be accomplished under Boards. This alternative envisions five (5) boards that are substance- or medium-specific. State boards would hear appeals; develop standards, guidelines and model ordinances; approve statewide regulations; approve individual regional zone plans; review regional implementation zone enforcement activity and take appropriate action as needed; serve as appeals bodies, if appropriate; and regulate substances or items for sale or use within the State.

Regional Level

At the regional level, the State would be divided into regional implementation zones based on watersheds. A single regional board within each watershed would be responsible for all permitting and enforcement activity. Each multi-media board would be responsible for implementation of permitting and enforcement activity governed by the individual state-level boards. The regional boards would replace activity currently conducted by AQMDs, RWQCBs, Local Enforcement Agencies, County Agriculture Commissioners, and CUPAs. Appeals of the local board decisions would, if statutorily allowed, be made to the appropriate state-level board.

3. Realign the responsibilities of all BDOs around function: risk assessment, risk mitigation (including regulation development), permitting, enforcement, clean-up, emergency response. Establish boards over each of the regulatory functions.

Establish regional boards responsible for all permitting and enforcement activity within each watershed-based local implementation zone. The current boundaries used by SWRCB are a reasonable level of distinction and would facilitate watershed management by aligning geographic boundaries of the various agencies. Each local board would be responsible for implementation of permitting and enforcement activity governed by the individual state-level boards. State boards would hear appeals; develop standards, guidelines and model ordinances; approve statewide regulations; approve individual zone plans; and regulate substances or items for sale or use within the State.

This alternative requires radical realignment of Cal/EPA and a fundamental shift in the way the State approaches environmental protection. Realignment by function rather than media would result in improved control and coordination of cross-media issues. Implementation would require the rebuilding of every board and department within Cal/EPA and at the local level. It would increase local control and allow for consistency within a single region, although inconsistencies could result between regions.

4. Convert all Boards to Departments.

This alternative would utilize the Executive Officer structure currently in place at each board, converting the Executive Officer into a Director and vesting in the Executive Officer the current duties arrogated to the boards. Some cost savings and efficiencies might result from this type of

reorganization. Departmentalization would also allow for quicker decision-making, even with the inclusion of public participation at each step in which the previously constituted boards would have had workshops or hearings. Regional implementation would occur through regional boards or regional departmental offices.

5. Enhance Statewide enforcement consistency by limiting local and regional roles.

This alternative could eliminate the CUPAs or give the State over-filing authority and an appellate function. AQMD decisions could be appealed by any interested party to the ARB. RWCQB decisions could be made provisional until the SWRCB approved. This alternative could improve consistency in application of statewide policies and programs.

6. Allow individual Board members to sit as voting members on more than one Board.

In the current construct, each Board focuses fairly exclusively on its own medium. Although staff consider what possible questions might arise and endeavor to find answers to those questions, cross-media implications may not arise. However, if a member of the SWRCB could legally sit as a voting member of the ARB, questions targeted at the cross-media implications would more likely arise and staff, in anticipation of these questions, would prepare for them. Implementation of this alternative would require clarification of current law related to appointees being able to sit on multiple boards. This alternative assumes that current Departments will become Boards.

FINDING 4 - RISK ASSESSMENT

The roles should be clarified for the Office of Environmental Health Hazard Assessment in performing basic risk assessments and for the BDOs in performing applied risk assessments within Cal/EPA. OEHHA may be overly dependent on funding from sources other than the General Fund.

DISCUSSION

Risk assessment functions of OEHHA and the boards and departments

OEHHA works to protect and enhance public health and the environment by evaluating risks posed by hazardous substances. OEHHA has been designated the principal State entity for environmental risk assessment, but the division between OEHHA and other BDO scientific roles and functions is not clear-cut. Some boards and departments perform their own risk assessment activities. However, the risk assessment activity in the boards and departments is, to a substantial degree, different than that performed in OEHHA. Risk assessment is a complex process comprised of many different activities and scientific disciplines. The distribution of roles and responsibilities under the broad descriptor of risk assessment has evolved since the creation of Cal/EPA in 1990.

Generally, OEHHA has the responsibility for assessing the inherent risk of chemicals, both individually as well as in combination with other substances. In addition, OEHHA has some capacity to assess the behavior of potentially toxic chemicals in the environment, for it is such behavior (often referred to as "fate and transport") which results in exposure to humans and/or impacts to ecosystems from chemicals. This basic information, as produced by OEHHA, is used by scientific staff within the boards and departments for purposes of determining specific risks in the context of a particular environmental medium, management scenario, emergency situation, or event. Examples of application of basic risk assessment information from OEHHA by board and department scientific staff include determination of Total Maximum Daily Loads (TMDLs) by Regional Water Boards, ambient air quality standards by the Air Board, and hazardous waste classification by DTSC. In conducting such board or department risk assessment, staff scientists rely heavily on specialized knowledge from board and department programs. To a substantial degree, therefore, the relationship between OEHHA and the risk assessment staff of the boards and departments is one of collaboration between those who develop the basic hazard and risk profiles for chemicals and those who apply such information in a particular risk management or regulatory context. Responsibility for risk assessment within Cal/EPA, therefore, appears to be, but actually is not, diffused.

OEHHA was established in 1991 by the Governor's Reorganization Plan with a mandate to provide the scientific leadership necessary to achieve Cal/EPA's mission and goals. The function of OEHHA was defined as follows:

The function of OEHHA will be to evaluate the health risks of chemicals in the environment. To this end, OEHHA will provide information to environmental regulators and the public about the health effects that result from environmental exposures to noninfectious agents. Emphasis will be placed on the synergistic and cumulative effects of total exposure from all pollution sources. OEHHA will identify, quantify, and recommend health-based standards for

chemicals in the environment, and provide technical and scientific support, consultation, and training to state regulators, local government agencies, and the public. OEHHA will also develop scientific policies and guidelines for risk assessment procedures for the Secretary. Finally, OEHHA will provide oversight of regulatory activities and guidance on scientific aspects of environmental protection.

Specific OEHHA activities will focus on chemicals in air, water, food, solid and hazardous waste, fish, sediment, and certain consumer products, as well as chemicals subject to the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

In 1993, the Legislature directed OEHHA to conduct an external scientific review of the risk assessment practices used by Cal/EPA. A Risk Assessment Advisory Committee (RAAC), a group of experts from outside California State Government, was appointed for this task. The RAAC Committee report, "A Review of the California Environmental Protection Agency's Risk Assessment Practices, Policies, and Guidelines", was issued in October 1996. The Committee found that Cal/EPA's risk assessment policies are of good quality. They also found that Cal/EPA's risk assessment policies and procedures were similar to the US EPA's policies and procedures. The RAAC Committee, though, had numerous recommendations for improving risk assessment in Cal/EPA. As a result of the RAAC Committee's report and recommendations, in December 1996, Governor Wilson issued Executive Order W-137-96 to establish a program to implement the recommendations of the RAAC Committee by January 1, 1999. He designated OEHHA as "the principal State agency for the coordination of procedures, forms, and deadlines related to human health risk assessment from chemicals in the environment." The boards and departments, in conducting applied site-specific or project-specific risk assessments, rely on OEHHA's protocols and basic risk conclusions (e.g., the unit risk value of a carcinogen).

The most recent Legislative Analyst's Office (LAO) review of the overall effectiveness of the Office of Environmental Health Hazard Assessment (OEHHA) was conducted as part of the 1997-1998 State budget analysis. LAO reviewed several factors that affected the overall effectiveness of OEHHA's risk assessment program. They found that OEHHA does not duplicate the risk assessment activities of the boards and departments.

OEHHA's independence and sources of funding

The Legislative Analyst's Office (LAO) also was concerned that reimbursements by the Boards and Departments might affect the independence of OEHHA. Although the LAO found that their concerns about the independence of OEHHA were mitigated somewhat by the peer review process, it seems natural that reimbursements from the funding organization might cause OEHHA to focus on the medium of the funding organization rather than perform a risk assessment that addresses all of the media.

An additional outcome of the RAAC Committee report was the designation of OEHHA as the lead entity for the development of a cross-media risk assessment model for Cal/EPA. The model is anticipated to have the ability to assess the environmental risk to air, land and water resulting from uncontrolled emissions of hazardous pollutants. According to OEHHA staff, it is expected that the model would be available to all BDOs. UC Davis has been selected as the consultant organization to determine the scope of the project. It is anticipated that the initial results from this project, including the "fate and transport" element will be made available in 2002.

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Timeliness and coordination

The timeliness of risk assessment review is key. Regulatory agencies within Cal/EPA are dependent on risk assessments to complete rulemakings, officially list toxic chemicals, define priorities, and complete other work products. Similarly, the regulated industry needs sign-off on complex, facility-specific risk analyses to obtain permit approvals, complete on-site risk mitigation projects, and/or comply with CEQA review. Interviewees noted some concern that the current reimbursement arrangements help provide an impetus for timely review and that changing this structure might have the unintended consequence of removing this impetus. This concern might be mitigated somewhat if OEHHA and the other Cal/EPA entities participated jointly in planning efforts that established mutually agreed to timelines for each OEHHA risk assessment. Aggressive project management, with routine reporting of project status and timelines to the entity requesting the assessment, would enhance the sense that OEHHA is committed to meeting agreed to deadlines.

CONCLUSION

Cross-media risk assessment is critical to protection of the environment as a whole. OEHHA is the designated entity within Cal/EPA for completing risk assessments and is in the process of developing a cross-media risk assessment model. Some BDOs are discontent with the way in which OEHHA carries out this function, although it appears that this discontent may be due, in part, to a failure by those entities to fully appreciate the distinction between basic risk assessment and applied risk assessments that are conducted as part of risk management decisions..

Funding for the risk assessment functions currently performed by OEHHA is through reimbursements from other BDOs within Cal/EPA, and it is consequently paid for by the specific regulated community rather than the General Fund. This reimbursement structure has the potential to compromise the credibility of a risk assessment completed by OEHHA.

ALTERNATIVES

1. Combine all of the risk assessment activities performed by the other Boards and Departments into a larger and more capable OEHHA.

This option would meet with a great deal of resistance from the Boards and Departments, and it would require extensive analysis to separate out the risk assessment functions from the risk management functions currently performed in the BDOs. It would create a more clear distinction between the risk assessment function and the risk management function but at the cost of specific programmatic expertise now used by the boards and departments to conduct specific risk assessments based on the basic data generated by OEHHA.

2. Fund all risk assessment activities from the General Fund rather than by reimbursements from the risk management organizations, so that the independence of the risk assessment organization to provide multi-media risk assessments cannot be compromised.

The activity of OEHHA is most appropriately General Fund based. The studies that the OEHHA staff perform are to ensure that the people of the State of California and the environment are protected. The funding switch to the General Fund also helps preserve the independence of the risk

assessment organization and ensures that it is able to provide multi-media risk assessments without regard to the specific medium which is the initial focus of a study.

3. Establish an Agency-wide standard for risk assessment.

The development of a cross-media risk assessment model that addresses implications to all media would be a significant step toward avoiding another incident like MTBE. The process currently underway at OEHHA to assess the scope of such a model is an important first step. Successful conclusion of this project will require dedication of effort by OEHHA staff and support by the Office of the Secretary. If such a model is developed and successfully meets the goal, the Agency should require that all BDOs adopt its use.

FINDING 5 – RISK MANAGEMENT

Cal/EPA lacks a formal, systematic mechanism for cross-media risk management. Currently OEHHA's basic risk assessment function has no clear, consistent role in risk management decisions by the boards and departments on a cross-media basis.

DISCUSSION

Risk management is the process of making informed evaluations about the possible adverse consequences of an event, developing appropriate mitigation alternatives, and selecting a course of action based on the specific circumstance. In some instances, the event may never materialize. In others, it may materialize but with the most minimal outcome. In worst case scenarios, the event materializes and the actual outcome is worse than any that was projected. Fundamentally, formal cross-media risk management within Cal/EPA is non-existent. Typically, cross-media risk management issues are informally discussed among staff counterparts in the respective BDOs. Occasionally, these discussions result in the elevation of a problem or issue to higher management, and the cross-media issue is formally addressed. Such was the case between technical staff, middle management, and the Executive Officers of the ARB and SWRCB on the MTBE issue. There were no procedures, policies, or scientific protocols requiring the communications, and no formal cross-media risk management process was employed.

To the extent that cross-media risk management issues are identified, Memoranda of Understanding have been executed. However, these agreements primarily specify the roles and responsibilities of the respective BDOs rather than implement cross-media solutions. More formalized and systematic mechanisms are needed that bring the BDOs together collaboratively to address all aspects of a cross-media issue.

The interview process provided some examples of instances where cross-media risk management should be employed. Dioxin was identified by several interviewees as an example of an emerging risk that will require a cross-media approach for resolution. However, the full extent and severity of the problem and consequences of potential mitigation strategies are currently undocumented.

To effectively manage environmental risks with a cross-media orientation, it is necessary to create tools with which to institutionalize behavior at all levels and in all organizational components of Cal/EPA. Risk management must be routine, not exceptional, and must be addressed and resolved at the lowest effective level in the organization.

Finally, risk management decisions depend on basic risk assessment information and the prioritization of that information for use in the context of the specific board or department. In the desire to separate basic scientific risk assessment from the practicalities of risk management, the risk assessments performed by OEHHA have come to have no formal implications for risk management decisions. If a substance is identified as a carcinogen by OEHHA, for example, and the substance is present in air, water, and land (i.e., not a vitamin, for example), there is no mechanism to (1) obtain the attention, much less action, of the ARB and Water Board to determine whether regulatory limits should be set; or (2) obtain the attention of DTSC as to whether more careful handling and tracking should be mandated by classifying waste containing that chemical as a hazardous waste. In the case of MTBE, for example, OEHHA findings have now resulted in the beginning of regulatory action by the ARB and SWRCB but no department-wide

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consideration by DTSC. Risk management decisions cannot be dictated by risk assessments, but the assessment function needs to feed into cross-media risk management decisions.

CONCLUSION

Cross-media risk management is critical to Cal/EPA's ability to safeguard the people of the State of California and the environment. No cross-media risk management mechanisms are in place to ensure that adequate and appropriate consideration is given to potential adverse impacts of substances that cross medium lines. Cross-media risk assessment is only one part of the process. In order for Cal/EPA to effectively protect the environment, a formal cross-media risk management process is necessary.

ALTERNATIVES

1. Develop a formal, Agency-wide cross-media risk management process.

The risk management process should describe how to determine if cross-media risk management is warranted and the specific procedures that will be followed to complete the risk management process when multiple media are involved. It should specify how the overall risk management process will be supervised (that is, who will have final authority to approve the risk management plan.)

2. Establish unified regulations within CAL/EPA for risk management.

In the recent past, the SWRCB and CIWMB have been successful in merging their respective regulations for managing landfills. The combined regulations clearly delineate the responsibilities of each entity without changing either the substance of the regulations or the responsibilities of the respective agencies. The two agencies held a joint public hearing on the draft regulations before adopting them separately as their own. While the process took considerable time to complete, the result is considered a significant improvement over the previously separate regulations. This concept of combined or unified regulations could be used to formally address the challenges created by regulations where the subject matter crosses department or media lines. Moreover, taken to the next level, unified regulations could institutionalize a unified approach to regulatory actions and solutions. As preparation for establishing unified regulations, applicable legislation should be analyzed and cross-referenced as appropriate to indicate potential cross-media impact.

3. Adopt standardized data and electronic reporting.

A comprehensive review of all regulated community data and reporting requirements, with a view toward eliminating data redundancy and reformatting the data to a cross-media orientation, would greatly enhance subsequent cross-media review. Receiving the reports electronically from the regulated community also would enhance the efficiency and effectiveness of compliance and enforcement programs. Improved use of information technology is discussed elsewhere in this report; however, its implications for institutionalizing cross-media review and actions are significant.

4. Create cross-media databases.

The feasibility of developing cross-media databases, or at least cross-media data linkages, could be explored. If these databases or linkages were established, staff would have more information needed to evaluate the cross-media implications of the activity in which they are engaged.

5. Develop cross-media review procedures and forms.

Revising procedures and forms utilized by BDO staffs that include cross references to potential cross-media implications would greatly enhance awareness of potential cross-media issues and the required action to resolve them. Coupled with the requirement to address or dispose of the issues forthcoming from the review, this alternative would assist in placing responsibility for resolving cross-media issues at the lowest effective level in the organization.

FINDING 6 - ENFORCEMENT

There are inconsistencies and inadequacies in the execution of enforcement activities statewide and within individual jurisdictions, including a lack of uniformity in the application of fines and penalties.

DISCUSSION

In the early 1990's, BDO resources were increasingly directed toward compliance assistance, voluntary compliance, and educating the industry and the public on proper resource management, hazardous material management and hazardous waste management. The previous Administration cut the budget of both compliance and enforcement personnel in some programs, resulting in fewer enforcement activities. In one instance an agreement was reached with a large industry that resulted in no inspections of a major potential source of pollution for two years by one of the BDOs. There was also a trend toward delegation of enforcement to local entities which in some cases are more subject to local economic pressures and less oriented toward enforcement than compliance, a trend stimulated in part by the desire to reduce state budget allocations. Interviewees were in general agreement that, although beneficial, compliance assistance efforts have not significantly deterred environmental violations. The most significant single contributing factor they identified with regard to the failure to deter violations is the lack of comprehensive environmental enforcement. This lack of enforcement has resulted in a relaxed attitude among those who are required to comply with the environmental and public health protections established in statutes and Environmental violations that adversely impact public health and safety continue. Enforcement is a tool for achieving increased compliance with environmental laws and regulations. It must be consistent, predictable, and fair across the entire State to be most effective.

Good enforcement programs have a number of ingredients. First, there is overall prioritization of enforcement activities to address those who cause the most environmental harm. Cross-media prioritization assures that the worst polluters are targeted on a comprehensive basis. Second, there must be sufficient enforcement activity to deter those who are not inspected from violating the law. Third, inspectors must be well-trained. Fourth, there must be a consistent, fair, and rapid enforcement process, with opportunities for interaction with the regulated entity at the beginning, middle, and end of the process. Fifth, there must be an emphasis on corrective action (or injunctive-type relief) to stop further violations. Sixth, fines and penalties must be consistent among programs and among violators to maintain a level playing field, they must deprive violators of the economic benefit of noncompliance, and they should deter further violations without being out of proportion to the violation committed or harm (if any) caused to the environment. An emphasis only on the number of inspections or amount of dollar penalties skews enforcement efforts without establishing a comprehensive and effective enforcement program.

Enforcement actions typically fall into one of three categories: administrative actions, civil actions, or criminal actions. Each of the BDOs that comprise Cal/EPA, with the exception of OEHHA, has some type of enforcement authority established in statute. The enforcement process varies significantly among the BDOs. Several contributing factors to these differences are:

• The "stovepipe" or "silo" development of California environmental programs

The individual BDOs and/or programs within the BDOs were created to address one or more specific problems. Each board or department has its own statutorily-created enforcement tools.

No two programs have the same authority for injunctive relief, imposition of penalties, revocation of permits, or other authorities, making coordinated action more difficult. Environmental programs have evolved over time with limited interaction with other State environmental entities and little cross-media analysis. Until recently there has been a lack of incentive to break down barriers between the BDOs.

• Explicit statutory requirements prescribing compliance and enforcement activities

Some actions and penalties are prescribed by statute, including a mandatory minimum penalty per violation. Other statutes are broadly discretionary. Statutes have not been written uniformly. Both the SWRCB and DTSC, following the model of federal EPA, are required to recover economic benefits gained as the result of violations. Specifically, the water code states, "at a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation." Other State programs do not have such requirements.

Permitting regulations are not reviewed from an enforcement perspective

This lack of guidance can result in the promulgation of conflicting regulations that may be unenforceable. One example is the overly broad definition of a "recycler." A solid waste management facility can evade the requirements for permitting as a solid waste facility by obtaining a recycling permit to stockpile "source separated" material. These "sham recyclers" conduct solid waste operations with no intention of implementing a true recycling program, collect significant fees by taking "waste" from customers, but avoid solid waste permitting and regulatory requirements. Pursuit of these businesses is time-consuming and extremely costly. In many instances, once the case has been taken to court, the facility owner declares bankruptcy and is not required to clean up the site.

Consistency for enforcement actions is needed.

Interviewees affirmed that the ideal process for sanctioning polluters would apply consistent factors and achieve generally consistent results, but it would allow each enforcement agency to take into consideration the unique facts of each case. State and local enforcement actions, including decisions whether to pursue civil or criminal actions and the level of fines or penalties sought, need to take into account statewide policy and should not result in widely disparate outcomes. However, factors such as ability to pay, bankruptcy, and alternative penalties, when consistently applied, are important and legitimate considerations. Currently, the discretion exercised by individual State and local agencies results in a wide spectrum of enforcement outcomes. Accordingly, more consistency is needed in enforcement implementation.

Lack of shared information regarding regulated entities among the BDOs

Cal/EPA has not developed automated systems that would provide access to cross-media information to support enforcement actions. "Gross-polluters" or "bad actors," as they are sometimes called, are often cross-media polluters. Identification of gross-polluters in one medium could result in more urgency being placed on the resolution of a violation, imposition of a fine or penalty, on behalf of another offended medium.

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The consensus of the interviewees was that enforcement must be a priority within the Administration, at the local and regional levels, and for the Legislature. Hundreds of violations occur for each formal enforcement action taken. Even when violations were noted, formal enforcement actions that resulted in fines, penalties, or civil litigation were extremely limited. A significant gap exists between the number of enforcement actions warranted and the number taken.

Environmental threats and environmental protection programs have changed dramatically over the past ten to 20 years, outstripping the appropriateness of many older laws and statutes. In addition, legislation is required to correct conflicting statutes and regulations. However, to analyze and understand exactly how to achieve uniformity in statutes is a daunting task. While the necessary analysis is underway to identify conflicting statutes and develop proposed legislative changes, administrative remedies might be implemented first.

Some of the BDO interviewees were aware of the Secretary's actions to bring them together to create a single Budget Change Proposal for FY 2000-01 entitled Comprehensive Enforcement Initiative. This effort was praised by many interviewees, but it also was seen as simply a first step toward the reestablishment of environmental enforcement in California. Other interviewees were unaware of this effort due to the confidentiality of the budget process; however, the overwhelming opinion of most of the interviewees was that there is a need for leadership and coordination by the Secretary to assure comprehensive, consistent, predictable, and fair enforcement, while allowing accommodation of individual circumstances. Nearly everyone interviewed felt that more resources need to be directed towards enforcement and that reallocation of existing resources will not suffice to address the need. The 2000-01 Governor's Budget proposes additional resources for enforcement activities. These resources should significantly aid enforcement activities. As these resources are committed, analysis should be conducted to measure their effect.

CONCLUSION

Enforcement is seen by the Legislature and the BDOs as an area where significant improvement is needed. New initiatives are underway to address concerns that have been expressed about the consistency and aggressiveness of BDOs in their pursuit of violators. Enforcement actions must be consistently pursued at both the State and local level. The discretion exercised by individual enforcement agencies should be guided by clear and practical statewide policy to ensure consistency and allow necessary flexibility.

ALTERNATIVES

1. Require each BDO to create an enforcement matrix that establishes a baseline for its administrative enforcement activities.

This matrix should take into account the number and severity of environmental violations under the BDO's purview, help determine the level of culpability, and define guidelines to separate accidental violation and negligence from willful misconduct. For maximum usefulness, the BDOs would need to work with the local implementing entities (such as LEAs, CUPAs, Agriculture Commissioners). The guideline also should recommend when escalation of enforcement is appropriate. Significant support for implementing this effort would have to be provided through the development of information systems to support enforcement actions. Once the matrices are complete, the Agency should review

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them, determine if change might be appropriate, and, when all analysis has been completed, publish them as a statewide guideline. DTSC already uses such a clearly delineated enforcement matrix as a result of federal models and requirements and State law.

2. Establish an Enforcement Advisory Group for each BDO that identifies and addresses enforcement issues within BDOs to improve consistency.

The model for this effort could be the Compliance and Assurance Enforcement Unit in place at the SWRCB, with the addition of the Deputy Secretary for Law Enforcement and Counsel (or designee) sitting on each Advisory Group. The Deputy Secretary then serves as the nexus for enforcement in Cal/EPA. On a monthly basis, a report of Regional Board enforcement actions is published. Applying this approach to the enforcement activities of all BDOs could significantly enhance communication and allow for staff and Board review for commonality and consistency of penalties. The SWRCB also posts the enforcement action reports on the Water Board Intranet. Cal/EPA should consider placing enforcement data determined to be public information on the Internet, thus providing more information to the public regarding polluters.

3. Enhance intra-Agency information sharing and coordination.

The Secretary already has taken significant steps to improve communication by facilitating meetings between the BDOs. Many of the interviewees mentioned their lack of information on what other BDOs were encountering and the need for automated information sharing. Common databases and a single Geographic Information System (GIS) would significantly enhance the capacity of each BDO to become educated about the full extent of their regulated entities' activities. With information of this type, BDOs more easily could implement coordinated inspections and enforcement actions without infringing on each other's territory. The Department of Industrial Relations has a coordinated, multiagency inspection and enforcement program, Targeted Industries Partnership Program (TIPP), that appears to be successful. This program may have some elements of structure and operation that could be used by Cal/EPA in establishing a similar mechanism to focus on gross polluters.

4. Establish a single enforcement unit for all of Cal/EPA that reports to the Deputy Secretary for Law Enforcement and Counsel.

This alternative clearly elevates the crucial nature of environmental enforcement by moving all such functions to report to the Deputy Secretary for Law Enforcement.

FINDING 7 – STRATEGIC VISION

This Agency has not articulated its strategic vision for environmental protection programs.

DISCUSSION

Based upon document review and interviews with key individuals in the BDOs, control agencies, the Legislature, and other government agencies, we have concluded that the Agency has not developed a clear statement of its environmental vision or strategic direction and priorities to share with the BDOs and other interested stakeholders. The only available strategic plan was prepared by the prior administration. This leaves the staff within the BDOs uncertain as to the environmental priorities they should address. The current Secretary was appointed approximately eleven months ago but until mid-October was without a complement of Deputy Secretaries and other staff. In light of this situation, it is understandable that the Secretary has not provided a comprehensive strategic vision package. However, during the course of our interviews and research, we found a consistent expression of desire that the Secretary document his vision soon.

A strategic planning process – a comprehensive process to establish goals and set program and budget priorities for environmental programs – would allow the Agency to better articulate the Administration's long term vision and goals to the BDOs, Legislature, environmental groups, regulated industry, scientific community, and general public. Once the Secretary's strategic vision has been established, BDOs should demonstrate how their current programs support that vision. Budgets submitted by the BDOs should tie each program element clearly to the Secretary's established vision and should be used by the Secretary as a measurement of the BDOs' success at meeting objectives.

The Secretary of Cal/EPA is required to work jointly with the Secretary of Resources to produce the Governor's Environmental Plan. Prior versions of this Plan have not focused on defining specific, measurable environmental protection goals, but have instead been more form than substance. The Secretary has available environmental indicators reports which provide discrete, measured assessments of specific environmental elements. These indicators should be considered in any strategic planning effort.

CONCLUSION

The BDOs, the Legislature and the environmental community as a whole believe that the Secretary should publish his strategic vision as soon as possible.

ALTERNATIVES

1. Require the BDOs to continue to prepare and/or update their strategic plans for approval by the Agency and Governor.

This alternative meets current Department of Finance requirements but has the liability of continuing the independent creation of separate strategies and priorities among the BDOs.

2. Establish a strategic planning process that integrates the strategic plans of individual BDOs with Agency-wide strategies and priorities.

This alternative envisions the Secretary providing the BDOs with a statement of Agency strategies and priorities that they must address in preparing their individual strategic plans. This Agency-level vision should incorporate some form of environmental indicators that allow for a more objective assessment of progress toward environmental health. Once the BDOs' plans are reviewed and approved by the Secretary, with perhaps refinement of the original Agency vision, the Secretary would issue a fully integrated, Agency-wide strategy for environmental protection that addresses cross-media as well as intra-Agency coordination.

FINDING 8 - FISCAL

In general, the current fiscal structure and fiscal statutory authority of the Cal/EPA organizations do not unreasonably restrict the allocation of funds. However, in certain situations limitations on the use of funds and declining revenues may create funding adequacy problems. The studies currently underway at many of the BDOs on the adequacy and source of funds for Cal/EPA programs are important to establish whether potential shortages will have a serious impact on the long-term viability of the Agency.

The overall approach to funding the programs in Cal/EPA is to provide a revenue source from the broad industry (e.g., mil tax on pesticides), a fee for the service provided (e.g., smog check fee), a fee from parties that are known to contribute to an environmental issue (e.g., waste dischargers), or from the General Fund where it has been determined to be an issue affecting the citizenry in general or a responsible party can not be identified (e.g., non-point source water pollution). Programs and funding to support those programs were established in a piecemeal fashion over the years. A breakdown of funding sources and statutory limitations that affect the use of the funds are provided in Appendix B to this report. Fees come from a variety of sources and flow into an account or fund that is used for the support of those programs related to the source of funding. Most of those interviewed in the BDOs suggested that this situation has an impact on the adequacy of funding in some areas, especially where specially-funded program revenue sources are declining but regulatory needs are not.. Some BDOs are struggling to respond to mandates where there is no single entity or type of entity that can reasonably be charged a fee. One of the most obvious examples of this situation is the SWRCB's non-point-source program.

We find the fiscal structure of the BDOs sufficiently flexible to allow the prioritization of programs within the Agency, but issues related to adequacy of funds need to be reviewed and resolved by the Agency in the near future.

DISCUSSION

Adequacy and Sources of Funds

The scope of the fiscal review of Cal/EPA was limited to sources of funding and the flexibility within the statutory authority to expend (prioritize) those funds. There was no evaluation of the adequacy of funding for any given program, although we will comment in broad terms on several programs. To review the adequacy of funding for a given program or the appropriateness of the level or source of revenue are separate and massive undertakings, and in some instances that effort has been recently completed or is underway. For example, DTSC required more than a yearlong task force effort that culminated in legislation to revise the fees they charge. The Governor recently asked DTSC to review their funding once again. In light of predicted shortfalls, a declining revenue base, and demonstrated needs for enforcement and other augmentations, this effort will undoubtedly be time-consuming. In addition, the SWRCB is now conducting a needs analysis which involves the review of their core programs and will require more than a year to complete. During the interview process, each BDO brought to our attention their concerns over adequacy and source of funds. The regulatory funding schema are extremely complex and have significant economic ramifications. Given the level of concern expressed during our data gathering process, we believe it is important to document some of the basic fiscal issues confronting the BDOs in the area of adequacy of funding.

Each BDO has several sources of funds, usually tied in some fashion to regulatory activity. In some cases the fees are broad-based, reflecting a legislative judgment that the benefits and burdens of regulation are more wide-ranging, such as those charged as tipping fees for disposing of solid waste (a fee that is passed on to community residents) and the Environmental Fee charged to corporations to support, in part, DTSC site mitigation efforts that cannot be charged to a solvent responsible party. Funding problems arise when fees are designed to diminish the base upon which fees are charged but the base of required services does not diminish commensurately, as in the case of tipping fees charged for trash disposal and disposal fees charged for landfilling of hazardous waste. In each instance, the fee-generating activity has declined as recycling has increased. However, those funds are also used for the ongoing regulation of recyclers, who present their own problems, or other activities, e.g., general enforcement, education, and pollution prevention; and these programs then suffer from funding shortfalls.

Those interviewed expressed that in previous years there was broad recognition that many, if not most, environmental protection activities benefit the public as a whole. While individual company permits primarily provide a license for a company to be in business, for example, enforcement of the law was seen as a general, public-good activity, which could be supported in part by fines and penalties but also reasonably through other means, such as the General Fund. Other activities, e.g., research, air and water basin planning, pollution prevention and education, employee training, and general administrative overhead, are more obviously public police power functions. According to interviewees, over the last decade there has been a tendency in many environmental programs, including the state park system in the Resources Agency, to put funding on the backs of the users. In the parks system, the slogan was that users should pay, ignoring the benefit to the public generally of having well-maintained parks. In the case of Cal/EPA programs, the slogan was that the "polluter should pay", which generally has been interpreted to mean that the specific regulated community should bear the majority of the funding burden. While there is every reason to make entities who cause pollution pay for cleanup or remediation of that pollution, the fees are controversial because they require non-polluting businesses to pay for the privilege of being in business (in the case of the Environmental Fee) and, in some instances, made polluters pay sums that were exorbitant in relation to the harm or pollution that they had caused.

Flexibility of Fund Allocation

With Department of Finance approval, proper notification to the Legislature, and within the constraints of the annual Budget Act, the Secretary has the flexibility to:

- Move money within each item of appropriation pursuant to Section 26 of the Budget Act. This allows the transfer of up to 20 percent of any category within the appropriation to another category within the same item, up to \$400,000, and up to ten percent of any category that is in excess of \$4 million. Larger amounts may be transferred after additional notification to the Legislature
- Create deficiencies in accordance with Section 27 of the Budget Act. These expenditures are limited to cases of unanticipated expenditures incurred in the operation of existing programs
- Accept federal funds or other non-state funds that were not considered during the budget appropriation process pursuant to Section 28 of the Budget Act

The recently completed FY 2000-01 budget preparation process included the participation of staff from all BDOs in the development of concepts, the review of proposals, and discussions with the Department of Finance involving all budget proposals within Cal/EPA. This process allowed the Secretary and the senior staff of each BDO to broaden their focus on issues and develop cross-media proposals. The prioritization and funding structure of the proposals were accomplished within the current funding sources with the statutory limitations on expenditure. As discussed in another finding, Cal/EPA should complete the strategic plan for the Agency so that the fiscal resources are targeted to those priorities developed in the plan.

Notwithstanding that we found reasonable ability to prioritize the use of funds within Cal/EPA, there are several issues unique to specific BDOs that we noted. The funding issues follow.

CIWMB Funding

Two funding issues should be addressed for this Board:

 Revenue from the surcharge on tipping fees (\$1.34 per ton of waste) will decline as the program is successful in reducing the waste stream flowing to waste disposal facilities. In the analysis of the 1995-96 budget bill, the LAO stated concerns regarding the financing of the waste reduction and resource recovery program, including:

The IWMA [Integrated Waste Management Account] is the primary source of funding for the CIWMB's permitting and enforcement functions and its waste reduction and resource recovery program. The account derives its revenues primarily from integrated waste management fees (a surcharge on "tipping fees") levied on operators of solid waste landfills.

A History of Declining, Unstable Revenues. The IWMA has a history of being a declining unstable revenue source. In part, this situation reflects the direct relationship between the amount of tipping fees collected and the state of the economy. Accordingly, as the economy declined, so did the revenue from the state surcharge on tipping fees. In addition, as the CIWMB successfully fulfills its mandate to divert waste from landfills, revenues associated with tipping fees will continue to decline over time.

The Legislative Analyst continued to express concern in the analysis of the 1997-98 budget, and noted:

The budget proposes that \$31.4 million (41 percent) of the CIWMB's total 1997-98 expenditures come from the IWMA. The account derives its revenues primarily from "tipping fees" based on the volume of waste disposal at landfills....

Revenue projections Are Subject to Uncertainty, and tended to Be Optimistic in the Past. The budget's estimates of tipping fees revenue for 1996-97 and 1997-98 are based on assumptions about the State's economy and the amount of waste diverted from landfills due to recycling and source reduction. Generally, the stronger the economy (particularly construction activity), the more waste that is generated and

sent to landfills. Assumptions about strength of the economy and the degree to which local jurisdictions will meet the statutory goal of 50 percent diversion of waste from landfills by 2000 are inherently uncertain. This uncertainty supports the need for a reserve, particularly if it is likely that revenues will be overestimated.

Our review of past projections of IWMA fee revenues finds there is a history of overestimation.

The economy has strengthened considerably since 1995-96 and 1997-98; however, the problems cited by the LAO still exist: (1) the IWMA is subject to economic conditions and (2) the more successful the diversion of waste, the less funding will be available to increase the percentage of diversion. The revenue to the IWMA has been strong and stable for the past several years but a downturn in economic conditions or decreasing tonnage on which the surcharge is based (an indication of a successful diversion program) would leave support for achieving more diversion in jeopardy. We would strongly recommend the establishment of a reserve to address these possibilities.

The resources available (and the associated effort) to clean up the millions of waste tires are inadequate.

Numerous legislative efforts have been unsuccessful in increasing the revenue for the Waste Tire program. A decision as to whether the fee of \$0.25 per tire should be increased, the General Fund applied, or some other funding mechanism developed should be pursued. We are aware that a report has been completed on this issue ("The California Waste Tire Program Evaluation and Recommendations: Final Report" June 1999) and that legislation is currently pending (SB 876) to address this issue. Both call for an increase in the per tire fee.

OEHHA Funding

The OEHHA funding is reliant on reimbursements. The level of General Fund program support has been increased in recent years; however, the OEHHA still performs risk assessments with funding provided from the risk manager. As stated in the LAO report on the 1997-98 budget, "For risk assessment to be scientifically credible, they ought to be conducted independent of 'risk managers' – regulators who make value judgements regarding acceptable levels of risk and reasonable control options in light of costs and benefits."

OEHHA's 1999-00 budget includes reimbursement from six outside sources amounting to \$3.5 million or 26 percent of their budget. Reimbursable work is being performed for the ARB, DTSC and the SWRCB. Of the \$3.5 million in reimbursements, \$1.2 million is from annual application fees for applicants seeking registration as a Class I or Class II environmental assessor. This is an appropriate reimbursement. A detailed review of the funding sources and the external review process should be undertaken and General Funds provided in those areas where independence of findings and recommendations can be questioned. In addition, the funding that comes from one risk manager (e.g., ARB) may require the OEHHA to focus on air quality issues to the exclusion of another medium (e.g., water quality), even if there is an apparent cross-media impact. Until OEHHA's funding is resolved, there always will be concerns that OEHHA's assessment of risk will be focused on the medium of the funding organization and not on the best science or the best overall risk assessment. Finding 4 provides additional detail and recommendations specifically on the issue of OEHHA's funding.

DTSC Funding

DTSC is currently responding to a directive from the Governor to "review the adequacy of the Hazardous Waste Management Program fee structure and future funding needs." An Informal Fee Advisory Panel to assist in that effort has been formed, with the intent of arriving at a consensus on fee increases necessary to adequately support the DTSC programs. Based on current projections, DTSC will face a funding shortfall in two years if: (1) current levels of service are maintained; (2) rent and salary increases are absorbed; and (3) the environmental fee revenue continues to come in below projection. The shortfall from the environmental fee appears to be primarily the result of the largest corporations counting the number of employees more exactly, given the substantial increase in fee at the highest level. This latter issue is significant, and the Board of Equalization will be auditing the payment of this fee next year. Although DTSC could raise more fees by relatively simple legislative adjustments, e.g., removing the artificial cap on generator fees paid by the largest generators of hazardous waste, another option available is the use of General Funds for publicly beneficial department programs.

SWRCB Funding

The current fiscal structure of the SWRCB limits the flexibility for reallocation of funds. SWRCB receives fees from more than 70 sources. There are many restrictions on the expenditure of moneys from these sources, limiting SWRCB's capacity to apply these funds to address changing needs. The SWRCB effort to deal with non-point source polluters needs to be addressed. Water pollution comes from two sources: (1) point sources where a polluter can be identified (an industry that discharges waste into a river, lake or underground water) and (2) non-point sources where pollutants are found in a river, lake, or underground water that can not be traced or attributed to a polluter (e.g., urban storm drains). The largest source of water pollution is from non-point sources. These are sources of pollution that come from agricultural runoff, timber harvest, urban storm drains, and roads where there is no party that is charged for the runoff. In some cases this may be appropriate; however, it would appear that some polluters are excluded from funding the water quality program because their precise contribution to the problem cannot be calculated.

Cal/EPA Funding - Expenditures for 1999-2000 by BDO

Air Resources Board

Revenue	\$ in	Expenditures	\$ in
	Millions		Millions
General Fund	29.3	Mobile Source	89.4
Motor Vehicle Account	59.1	Stationary Source	42.4
Air Pollution Control	23.8	Local Assistance	7.5
Vehicle Inspection and Repair	9.5		
Air Toxics Inventory and Assessment	1.5		
Federal	10.8		
Reimbursements	5.1		
High Polluter Account	0.2		

Total Revenue \$139.3 Total Expenditures \$139.3

California Integrated Waste Management Board

Revenue	\$ in	Expenditures	\$ in
	Millions		Millions
IWMA (Solid Waste)	49.1	Planning & Enforcement	23.0
CUORF (OIL)	22.1	Disposal Site Cleanup & Maintenance	5.0
CTRMF (Tires)	5.8	Waste Reduction & Resource Recovery	62.4
RMDRL (Recycling)	2.0	Tire Recycling	10.6
SWDTF (Solid Waste)	0.8		
Federal	2.1		

Total Revenue * \$81.9 Total Expenditures \$101.0

Department of Pesticide Regulation

Revenue	\$ in	Expenditures	\$ in
	Millions		Millions
General Fund	13.8	Registration and Health Evaluation	13.2
Pesticide Regulation	33.4	Enforcement, Environmental Monitoring & Data Management	26.8
Environmental License Plate	0.5	Local Assistance	12.9
Food & Safety Account	1.9		
Federal	2.2		
Reimbursements	0.7		

Total Expenditures

*Expenditures may exceed revenues if reserves are used to support specific programs.

\$52.5

Total Revenue *

\$52.9

Department of Toxic Substances Control

Revenue	\$ in	Expenditures	\$ in
	Millions		Millions
General Fund	40.4	Hazard Waste Mgmt	38.5
Hazard Waste Control Account	31.4	Site Mitigation	79.1
Toxic Substance Control Account	30.9	Science Pollution Prevention & Technology	11.0
Federal	22.2	Fee Collection	4.0
Reimbursements	4.2		
Miscellaneous	3.5		
Total Revenue	\$132.6	Total Expenditures	\$132.6

Office of Environmental Health Hazard Assessment

Revenue	\$ in	Expenditures	\$ in
	Millions		Millions
General Fund	9.2	Health Risk Assessment	13.4
Environmental License Plate	8.0		
Reimbursements	3.5		
Total Revenue *	\$13.5	Total Expenditures	\$13.4

Water Resources Control Board

Revenue	\$ in	Expenditures	\$ in
	Millions		Millions
General Fund	56.8	Core Regulatory Program	45.6
Waste Discharge Permit Fund	14.4	Non-point Source Program	13.3
Environmental Protection Trust Fund	1.5	Spills, Leaks, Investigation and Cleanup	11.5
IWMA (Solid Waste)	5.6	Water Quality Management	30.0
Underground Storage Tank Cleanup Fund	220.4	Tank Programs	234.1
Bond Funds	66.0	Loans & Grants	161.6
Federal	124.0	Licensing & Permits	8.9
Other	13.5	Water Rights Enforcement	1.6

^{*}Expenditures may exceed revenues if reserves are used to support specific programs.

Total Expenditures

\$502.2

Total Revenue *

\$506.6

ALTERNATIVES

While the existing fiscal structure does allow reasonable flexibility in applying the funds received by the BDOs, there are ways to make the system more flexible and/or provide the Secretary the means to take action to address an immediate problem without the time-consuming task of obtaining prior Legislative approval.

1. Provide a cost of living adjustment (COLA) in those fees that do not currently contain one.

Several fees have a COLA built into the authorizing statute, but the majority of fees do not. To allow for normal increases in the cost of doing business (salary increases as well as the cost of goods and services), a built-in COLA would avoid the problem of not being able to fund the existing program level.

2. Place all funds in the General Fund and let the environmental programs compete with all other State programs for funding.

To allow the environmental programs to compete with all other State-funded programs would eliminate the direct linkage to fees and allow the environmental programs to compete directly with all State General Fund programs. This would weaken the direct link to the "polluter pays" approach. In addition, by making the funds eligible for potential statewide allocation, a legal question would need to be resolved as to whether the fees would be considered a tax.

3. Combine all funds collected by the BDOs into an Environmental Protection Fund to be used for the broad purpose of environmental protection.

This option would continue the requirement that funds collected by the BDOs would be expended for environmental protection programs, but it would provide the maximum flexibility for setting priorities.

4. Provide statutory authority for the Secretary of Cal/EPA to access a limited percentage of Cal/EPA special funds/accounts if an issue requiring immediate attention develops.

This proposal would reduce the need to utilize Sections 26 and 27 of the annual Budget Act. It would not create a deficiency or remove funding from one program to pay for another. It would allow the Secretary to fund a program that meets a stringent requirement and probably would require notification of the Legislature at the time of expenditure (depending on the final language granting the authority).

5. Provide statutory authority for the Secretary of Cal/EPA to borrow from funds within the Agency.

This proposal has the attributes of Alternative 4 above, but it may be more acceptable to the stakeholders that pay the fees because the funds would be paid back eventually.

6. The Secretary should assess the feasibility of shifting current funding sources.

Although not directly within the scope of the review, we believe that the issues and concerns raised by those interviewed appear to be significant enough to warrant additional study. There are at least two general areas on which the Secretary could focus additional study:

- Shift publicly-oriented protection programs to the General Fund on a phased basis, allowing for fact-finding and policy debate for each phase. Phases might include educational and information programs, staff training and administrative overhead, planning and research programs, and enforcement
- Consider another broad-based fee based on consumer products or activities, analogous to a
 utilities fee at the local level, to address the burdens and benefits of regulation associated with
 the public

FINDING 9 – PHYSICAL CO-LOCATION

The upcoming co-location of the BDOs and the Office of the Secretary holds significant potential to affect the overall operation of Cal/EPA.

DISCUSSION

Cal/EPA is in the process of completing the plans to move the entire Cal/EPA (with the exception of the OEHHA researchers in Oakland and field and regional staffs) into a single building. This relocation is anticipated to begin in August 2000 and conclude by December 2000. The co-location plans go further than merely sharing the same office building. The plans call for the executive staff (including the Secretary, Board Chairs, Executive Officers and Directors) to be housed on the same floor. The balance of the support services (e.g., Administration, Information Technology) also will be housed by function, with similar functions located on the same floors. BDO programs will be housed together throughout the building.

Cross-media Implications

The move to the new building should increase opportunities for cross-media awareness and discussions at both staff and executive levels. One of the impediments to effective cross-media discussion is that the BDO staff are not conveniently able to engage in such dialogue. Physical separation of the BDOs leads to staff not engaging others from outside their own BDO in routine discussions. This does not mean that no cross-BDO dialogue occurs now. However, it will be easier to initiate and continue these dialogues as a regular part of daily routine when all parties are housed in the same building.

At the executive level, the impact also will be significant. Now, Board meetings are conducted at the headquarters building of the specific Board. Nothing prohibits a Board member from attending another Board's meetings, but the physical separation does not make this an easy task. With the move to the new building, Sacramento Board meetings will be held in one of the hearing rooms within the building, greatly simplifying the logistics if a Board member wishes to attend another Board's meeting. Similarly, departmental rule-making hearings will be more easily attended by staff or executives of another BDO. In addition, the co-location of the Board members and Directors themselves may result in opportunities for stronger relationships, which could enhance cross-media discussions.

Administrative Support Functions

Each BDO has its own administrative support functions: human resources, budgeting, accounting, information technology, business services, public information, etc. The co-location of the BDOs to a central office site allows the Agency to consider increasing the overall efficiency of governmental service delivery without jeopardizing service by implementing centralized or streamlined administrative services functions. For example, it does not seem unreasonable that a single business services operation could, or should, provide support for all of Cal/EPA. Consolidation or streamlining that focuses on provision of excellent service to meet the needs of all customers and the program staff without sacrificing the interests of one BDO for another could significantly enhance the overall operation of Cal/EPA and foster a feeling of collegiality that the Agency currently lacks.

CONCLUSION

The move to the new Cal/EPA building appears to present significant opportunities for improved inter-BDO cooperation and coordination and increased Agency efficiencies through the consolidation of support functions.

ALTERNATIVES

1. Establish an office or department of Administrative Services for Cal/EPA.

This entity would provide administrative services for all BDOs within Cal/EPA, including the Office of the Secretary. The Department would handle the following functions: human resources, financial services, business services, information technology, and building support (such as coordinating moves, maintaining "unassigned" rooms within the building, etc.). Funding for this Department would be through negotiated pro rata. Using the quality initiative already in place in the Agency, this Department could be crafted to be an example of providing world-class service to multiple organizations without sacrificing the quality of service provided to any single entity.

2. Reduce the number of units providing duplicative service.

Without establishing a completely separate Department, the number of units providing duplicative service could be reduced by consolidating support units. The Office of the Secretary currently pays for information technology support from one of the BDOs. Similar inter-Agency agreements could be established to allow one or more BDO to provide specific services to other BDOs. To ensure that unproductive bidding wars do not occur, this effort should be carefully shepherded by the Office of the Secretary.

3. Establish a Building Support Unit within the Office of the Secretary to specifically manage issues associated with sharing the building.

This alternative focuses on those aspects of support services that are most closely related to the shared building. Under this alternative, the Office of the Secretary would assume responsibility for managing unassigned space (meeting and hearing rooms, parking, etc.), coordinating moves, and the network backbone of the building. The network backbone becomes an issue in places like a hearing room or conference room when a jack fails and must be replaced.

FINDING 10 - INFORMATION MANAGEMENT

Cal/EPA lacks an Agency-wide integrated approach to information management.

DISCUSSION

The Objectives and Strategies section of the 1998 Cal/EPA Strategic Plan stated that the Agency should "maximize the use of information technology programmatically and in their external products and services." This objective emphasizes the importance of information management to the success of the Agency. In response to that strategy statement, the Agency continued to utilize the six well-established information technology (IT) units, one to satisfy each BDO's information requirements.

The result of this approach is that each BDO IT unit has been established to design, develop, and support hardware, software, and databases necessary to carry out the specific programs of its parent organization. Each BDO has evolved an IT strategy based on its own organizational goals and structure and has implemented technology that is both similar and diverse across the Agency. For example: all BDOs use some version of Novel NetWare as their network operating system, but each BDO uses a different mix of database technologies and supporting hardware and software platforms.

Because each BDO has its own information management method and approach, the BDOs cannot share data directly. This creates difficulties for the Agency, BDOs, local entities, the public, and Cal/EPA regulated entities:

- Essential data for monitoring and tracking Agency/BDO activities (permitting, enforcement, etc.)
 are not directly accessible at the Agency level nor can the data be shared between the individual
 BDOs. The Agency can respond to requests for information only by requesting data from each
 appropriate BDO; it lacks direct access to the appropriate data. This process creates a number of
 bottlenecks:
 - Assigning responsibility for handling the request (Agency, BDO, local entities)
 - Determining the correct BDO(s) from which to request data
 - Tracking responses to requests effectively
 - If the request involves multiple BDOs, integrating multiple data types and formats
 - Resolving questions that arise from the request and gaining complete understanding of the data
 - Establishing and meeting acceptable response time to the request
- Integrated data are not available to the public through a single source such as an Agency Web site.
- Data collection is limited to that used by each BDO to carry out its business and there is no attempt to consolidate the data collection or data storage efforts. There is no integrated regulated entity information database or an integration of BDO data used to track and maintain regulated entities. The Agency has expressed the intent to integrate permitting when more than one BDO permit is required; however, the current segregation of data makes this impossible.

- There are numerous GIS in place throughout the BDOs. Efforts are underway to increase the use
 of the GIS at each BDO, but no integrated approach has been taken to evaluate the feasibility of
 merging these numerous databases into a single, comprehensive database that is shared by all
 BDOs and made available to the public.
- Common regulated entity information is lacking and multiple BDO databases may require updating with respect to:
 - Permit status
 - Violation status
 - Enforcement status
 - Cross-media data
- Data available at the local level are inconsistent; the data that are available are typically BDO-specific and may require the local entities to expend resources to access or enter diversified data.
- Each BDO has its own regulated entities, but the same entity may be regulated by two or more of the BDOs. It is the responsibility of each regulated entity to follow the rules, processes, and procedures, including information requirements, posed by the specific BDO with which they are currently dealing, even if they are also supplying common data (e.g., business information, permitting information required, etc.) to one or more other BDOs.

A Chief Information Officer (CIO) position has been established by each BDO to head its IT unit. In addition to managing their respective units, the CIOs serve on the Cal/EPA Information Managers' Advisory Council (IMAC). The IMAC was created to provide technology expertise and guidance to the Agency and establish an Agency-wide information management approach, however, it has been unsuccessful in accomplishing this Agency-wide objective. The IMAC's inability to provide needed leadership has largely precluded the Agency from meeting its strategic objective for information management.

The State's Department of Information Technology (DOIT) has been authorized to position a CIO in the office of each Agency Secretary. If filled with an appropriately qualified individual, this currently unfilled position could radically change the way information technology is coordinated from an Agency perspective. However, at present, the role and function of that position are unclear.

Until now, the BDOs have been spread throughout the Sacramento area, limiting the feasibility of consolidation and coordination of services. However, the upcoming move to a common building provides Cal/EPA with an opportunity to consolidate redundant functions and take a new look at the Agency's approach to information management. In addition, recent advances in the uses of Web-based technologies have radically altered the way in which disparate locations (such as Regional Water Boards or field offices) can access technology.

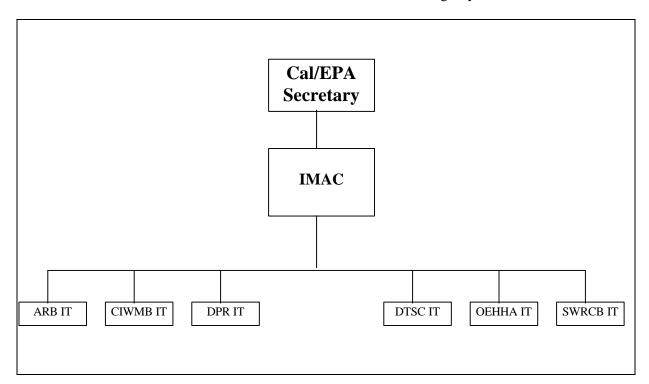
CONCLUSION

Cal/EPA is unlike other California state agencies due to the state of interconnectedness of the areas under its purview. The actions of one BDO has an impact on the other BDOs. It is, therefore, critical that the data that support the decision-making processes at both the BDO and Agency levels are managed from that perspective. The current IT strategy precludes the opportunity for Agency-wide coordination and integration of information technology in Cal/EPA. The BDOs have developed their information systems to address the specific needs of their staff. However, this approach does not enhance the capability of the individual BDOs or the Agency as a whole to adequately address the cross-media needs.

ALTERNATIVES

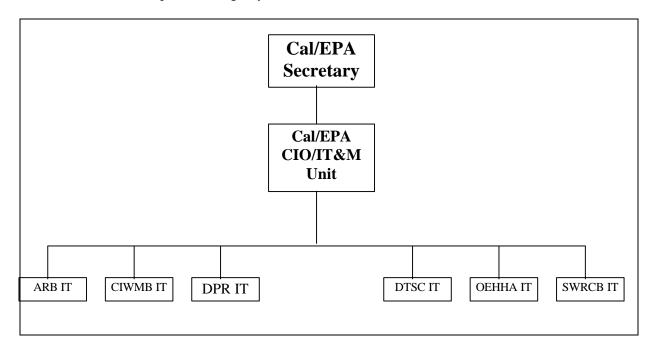
1. Use the DOIT Agency Chief Information Officer (ACIO) position to develop Agency information technology and information management strategy and direction.

The Agency CIO would chair and work with the IMAC to achieve Agency information management objectives through the BDO IT units (see chart below). Guidelines and standards for information technology for the entire agency would be created by the ACIO in conjunction with the IMAC. Each BDO would retain its current IT structure, but it would adhere to Agency standards.



2. Establish a Cal/EPA information management unit headed by an Agency CIO.

This organization would provide a unified technology and data management approach from an Agency perspective. The IMAC would be abolished. The ACIO would develop information management guidelines and standards for the entire Agency. BDOs would be required to adhere to the guidelines and standards developed at the Agency level.



3. Establish an Agency-wide Cal/EPA IT unit headed by a CIO.

The Agency-level IT organization would evolve over a short period of time into a consolidated Cal/EPA Information Technology and Management (IT&M) organization subsuming the current BDO Information Technology unit resources (technology and staff). This would create a single Cal/EPA structure for information management to provide support and services to the BDOs and address cross-BDO information requirements.

4. Explore mechanisms to enhance data sharing opportunities.

There are a number of recent advances in information technology that focus on increasing the ease with which data is shared between and among entities. Scientific and other data play an important role in the daily operation of the BDOs and the Office of the Secretary. Data that are currently available to only one BDO should be made available to the others to facilitate planning and decision-making in all program areas and to the public through Web sites.